

NEGMADJANOV B.B., SHAVKATOV.X.SH.

**COLLECTION OF TESTS AND CLINICAL
CASE SCENARIOS IN OBSTETRICS**

[EDUCATIONAL MANUAL]

SAMARKAND - 2025

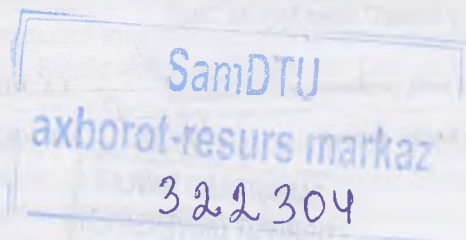
**REPUBLIC OF UZBEKISTAN MINISTRY OF HEALTH
SAMARKAND STATE MEDICAL UNIVERSITY**



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This educational manual has been developed in accordance with the academic curriculum and is intended for students of higher medical institutions. It incorporates contemporary scientific advancements while also considering the climatic and social conditions of our country.

The manual covers 13 fundamental topics in obstetrics and includes both test questions and situational cases. At the end of the manual, answers to the test questions and solutions to the cases are provided, enabling students to independently assess their knowledge. The collection encompasses key aspects of obstetrics, featuring a variety of test formats and case-based clinical scenarios. This approach not only strengthens theoretical knowledge but also fosters clinical reasoning skills and a comprehensive understanding of the subject. The inclusion of situational cases simulating real clinical scenarios is particularly valuable, as it equips students with essential diagnostic and decision-making skills in the face of medical uncertainty, a crucial aspect of practical medicine.

This educational manual is designed for undergraduate (bachelor's), master's, and residency students of the International Faculty at higher medical institutions

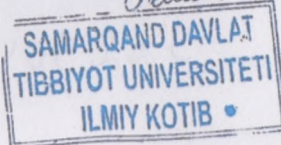
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TOPIC I. ANATOMY OF FEMALE REPRODUCTIVE ORGANS. FETAL SKULL AND MATERNAL PELVIS

Test questions:

1. Which of the following is NOT a part of the female reproductive system?

- a) Ovary
- b) Fallopian tube
- c) Uterus
- d) Prostate gland
- e) Vagina

2. The main function of the ovaries is to:

- a) Produce sperm
- b) Produce eggs and hormones
- c) Transport the fertilized egg to the uterus
- d) Support fetal development
- e) Store urine

3. The uterus is located:

- a) Anterior to the bladder
- b) Posterior to the rectum
- c) Between the bladder and rectum
- d) Inside the fallopian tube
- e) In the abdominal cavity

4. Which hormone is primarily responsible for ovulation?

- a) Estrogen
- b) Progesterone
- c) Luteinizing hormone (LH)
- d) Oxytocin
- e) Prolactin

5. The cervix is:

- a) The upper part of the uterus
- b) The lower part of the uterus
- c) The outer opening of the vagina
- d) A structure found only in males
- e) A hormone secreted by the placenta

6. The fallopian tubes serve the function of:

- a) Producing eggs
- b) Nourishing the fetus

- c) Transporting eggs from the ovary to the uterus
- d) Producing estrogen
- e) Storing sperm

7. The primary site of fertilization in the female reproductive system is:

- a) The ovary
- b) The uterus
- c) The cervix
- d) The fallopian tube
- e) The vagina

8. The vagina connects the uterus to:

- a) The ovaries
- b) The bladder
- c) The outside of the body
- d) The rectum
- e) The fallopian tubes

9. Which structure is responsible for hormone production in early pregnancy?

- a) Endometrium
- b) Fallopian tube
- c) Placenta
- d) Corpus luteum
- e) Myometrium

10. The broad ligament supports:

- a) The uterus, fallopian tubes, and ovaries
- b) The bladder
- c) The rectum
- d) The pubic bone
- e) The placenta

11. The fetal skull consists of:

- a) One frontal bone
- b) Two frontal bones
- c) Three occipital bones
- d) One temporal bone
- e) No sutures

12. The largest diameter of the fetal skull is:

- a) Biparietal diameter
- b) Suboccipitobregmatic diameter
- c) Mentovortex diameter

d) Occipitofrontal diameter

e) Transverse diameter

13. Which part of the fetal skull is the most flexible during delivery?

a) Parietal bone

b) Occipital bone

c) Frontal bone

d) Sutures and fontanelles

e) Mandible

14. The anterior fontanelle closes by the age of:

a) 1 month

b) 6 months

c) 12 months

d) 18-24 months

e) 3 years

15. The smallest diameter of the fetal skull is:

a) Occipitofrontal diameter

b) Suboccipitobregmatic diameter

c) Biparietal diameter

d) Occipitomenal diameter

e) Mentovortex diameter

16. The pelvic inlet is widest in which diameter?

a) Transverse

b) Anteroposterior

c) Oblique

d) Sagittal

e) Longitudinal

17. The shape of the female pelvis is classified into how many types?

a) Two

b) Three

c) Four

d) Five

e) Six

18. The most favorable type of pelvis for vaginal delivery is:

a) Android

b) Anthropoid

c) Gynecoid

d) Platypelloid

e) None of the above

19. The true conjugate diameter is measured from:

- a) The sacral promontory to the inferior border of the pubic symphysis
- b) The sacral promontory to the upper border of the pubic symphysis
- c) The transverse diameter of the pelvis
- d) The ischial spines
- e) The posterior pelvic wall

20. The pelvic outlet is formed by:

- a) Ischial spines, pubic arch, and coccyx
- b) Iliac crests
- c) Sacroiliac joints
- d) The ischium alone
- e) The sacrum alone

21. Which suture separates the two parietal bones in the fetal skull?

- a) Coronal
- b) Lambdoid
- c) Sagittal
- d) Squamous
- e) Metopic

22. The narrowest part of the pelvis that the fetal head must pass through is:

- a) Pelvic inlet
- b) Pelvic outlet
- c) Mid-pelvis
- d) Sacroiliac joint
- e) Uterus

23. The diagonal conjugate is used to estimate:

- a) Fetal skull size
- b) The true conjugate diameter
- c) Uterine size
- d) Placental position
- e) Pelvic rotation

24. Engagement of the fetal head means:

- a) The fetal head has entered the pelvic inlet
- b) The fetal head is out of the cervix
- c) The baby is fully delivered
- d) The placenta is separating
- e) The baby is in breech position

25. Which part of the maternal pelvis is most commonly fractured during childbirth?

- a) Ischial spines
- b) Iliac crest
- c) Sacrum
- d) Coccyx
- e) Pubic symphysis

26. The function of the round ligament of the uterus is to:

- a) Support the ovary
- b) Maintain the anteverted position of the uterus
- c) Connect the uterus to the sacrum
- d) Carry blood supply to the uterus
- e) Prevent uterine contractions

27. Which part of the fetal skull presents first in a normal cephalic delivery?

- a) Occiput
- b) Frontal bone
- c) Parietal bone
- d) Mentum (chin)
- e) Temporal bone

28. The interspinous diameter of the pelvis is important because:

- a) It is the widest part of the pelvis
- b) It determines the narrowest passage for the fetal head
- c) It indicates fetal head engagement
- d) It helps measure fetal weight
- e) It predicts fetal heart rate

29. The posterior fontanelle closes at approximately:

- a) Birth
- b) 2 weeks
- c) 2 months
- d) 6 months
- e) 1 year

30. Which maternal pelvic measurement is most critical for determining the feasibility of vaginal delivery?

- a) True conjugate
- b) Biparietal diameter
- c) Intertrochanteric distance
- d) Pelvic circumference
- e) Pubic arch angle

Situational tasks:

Case 1

Chief complaint and history: A 24-year-old primigravida at 38 weeks gestation presents for labor assessment. She is 5 feet (152 cm) tall, and her ultrasound suggests fetal macrosomia (estimated fetal weight 4.3 kg). On vaginal examination, the head is high and not engaged.

Vital signs: BP: 120/80 mmHg, pulse: 85 bpm, temperature: 37°C.

Questions:

1. What is the most likely diagnosis?

- a) Normal labor progression
- b) Cephalopelvic disproportion (CPD)
- c) Preterm labor
- d) Uterine rupture
- e) Fetal distress

2. What is the best management option?

- a) Allow trial of labor
- b) Emergency cesarean section
- c) Forceps-assisted vaginal delivery
- d) Oxytocin augmentation
- e) Expectant management

Case 2

Chief complaint and history: A 26-year-old woman at 39 weeks gestation is in active labor. Her cervix is 8 cm dilated, and the fetal head is engaged in the midpelvis. Her pelvimetry suggests an android pelvis.

Vital signs: BP: 118/76 mmHg, pulse: 90 bpm, temperature: 37.1°C.

Questions:

1. What is the most common labor pattern in an android pelvis?

- a) Normal labor progression
- b) Prolonged labor with fetal malposition
- c) Rapid spontaneous delivery
- d) Cord prolapse
- e) Increased risk of uterine rupture

2. Which fetal position is most commonly associated with an android pelvis?

- a) Occiput anterior
- b) Occiput transverse
- c) Occiput posterior
- d) Breech
- e) Face presentation

Case 3

Chief complaint and history: A 30-year-old woman presents with a prolonged second stage of labor. Her fetus is in the occiput posterior position. On vaginal examination, the fetal head shows overlapping sutures.

Vital signs: BP: 115/70 mmHg, pulse: 88 bpm, temperature: 37.2°C.

Questions:

1. What is the most likely explanation for overlapping sutures?

- a) Craniosynostosis
- b) Normal molding of the fetal skull
- c) Hydrocephalus
- d) Cephalohematoma
- e) Fetal distress

2. What is the best management?

- a) Continue monitoring and allow vaginal delivery
- b) Perform emergency cesarean section
- c) Apply vacuum extraction
- d) Use forceps for assisted delivery
- e) Perform immediate episiotomy

Case 4

Chief complaint and history: A newborn baby is examined after a spontaneous vaginal delivery. The anterior fontanelle is open, soft, and pulsating, while the posterior fontanelle is closed.

Vital signs: HR: 140 bpm, RR: 40 bpm, temperature: 36.8°C.

Questions:

1. What is the normal closure time for the anterior fontanelle?

- a) 1-2 months
- b) 3-6 months
- c) 9-12 months
- d) 12-18 months
- e) 24-30 months

2. Which bones form the anterior fontanelle?

- a) Parietal and frontal bones
- b) Occipital and parietal bones
- c) Temporal and frontal bones
- d) Mandible and frontal bones
- e) Parietal and sphenoid bones

Case 5

Chief complaint and history: A 27-year-old woman in labor is assessed for fetal descent. The fetal head is at the ischial spines (station 0).

Vital signs: BP: 118/78 mmHg, pulse: 85 bpm, temperature: 37°C.

Questions:

1. What does station 0 indicate?

- a) Fetal head is floating
- b) Fetal head is engaged
- c) Fetal head is crowning
- d) Fetal head is below the ischial spines
- e) Fetal head is above the pelvic inlet

2. What is the best next step in management?

- a) Proceed with labor monitoring
- b) Perform cesarean section
- c) Apply vacuum extraction
- d) Induce labor with oxytocin
- e) Prepare for immediate delivery

Case 6

Chief complaint and history: A 32-year-old woman at 37 weeks gestation presents with breech presentation confirmed by ultrasound.

Vital signs: BP: 120/80 mmHg, pulse: 88 bpm, temperature: 36.9°C.

Questions:

1. What is the most common type of breech presentation?

- a) Complete breech
- b) Frank breech
- c) Footling breech
- d) Transverse lie
- e) Occiput posterior

2. What is the best mode of delivery in a primigravida with breech presentation?

- a) Cesarean section
- b) Spontaneous vaginal breech delivery
- c) Forceps-assisted delivery
- d) External cephalic version at 40 weeks
- e) Expectant management

Case 7

Chief complaint and history: A 28-year-old primigravida at 40 weeks gestation presents in active labor for the past 12 hours. The cervix is fully

dilated, but the fetal head remains at station -2. The fetal weight is estimated at 4.2 kg.

Vital signs: BP: 125/80 mmHg, pulse: 90 bpm, temperature: 37.1°C.

Questions:

1. What is the most likely diagnosis?

- a) Fetal distress
- b) Cephalopelvic disproportion (CPD)
- c) Preterm labor
- d) Normal labor progression
- e) Cord prolapse

2. What is the best management option?

- a) Continue labor monitoring
- b) Perform an emergency cesarean section
- c) Apply vacuum extraction
- d) Use oxytocin to increase contractions
- e) Attempt forceps-assisted delivery

Case 8

Chief complaint and history: A 30-year-old woman in active labor has been pushing for 2 hours, but the baby's head is still at station +1. A caput succedaneum is noted, and the sutures of the fetal skull are overlapping on vaginal examination.

Vital signs: BP: 118/76 mmHg, pulse: 92 bpm, temperature: 37.2°C.

Questions:

1. What does overlapping fetal skull sutures indicate?

- a) Hydrocephalus
- b) Normal molding
- c) Fetal macrosomia
- d) Craniosynostosis
- e) Intrauterine growth restriction

2. What is the best management?

- a) Continue monitoring labor
- b) Perform an emergency cesarean section
- c) Apply forceps
- d) Use oxytocin to augment labor
- e) Immediate vacuum extraction

Case 9

Chief complaint and history: A newborn delivered by forceps-assisted vaginal delivery presents with swelling over the parietal region and irritability.

Vital signs: HR: 150 bpm, RR: 45 bpm, temperature: 36.8°C.

Questions:

1. What is the most likely diagnosis?

- a) Caput succedaneum
- b) Cephalohematoma
- c) Depressed skull fracture
- d) Subgaleal hemorrhage
- e) Meningitis

2. What is the best next step?

- a) Immediate neurosurgical consultation
- b) No intervention, observe for spontaneous resolution
- c) Perform an urgent CT scan of the head
- d) Apply a pressure bandage
- e) Administer IV antibiotics

Case 10

Chief complaint and history: A 32-year-old woman is in the second stage of labor. The head delivers, but the shoulders do not follow despite maternal pushing. The fetus weighs 4.5 kg, and there is difficulty delivering the anterior shoulder.

Vital signs: BP: 130/85 mmHg, pulse: 95 bpm, temperature: 37.0°C.

Questions:

1. What is the most likely diagnosis?

- a) Breech presentation
- b) Shoulder dystocia
- c) Occiput posterior presentation
- d) Umbilical cord prolapse
- e) Uterine rupture

2. What is the best immediate management?

- a) McRoberts maneuver
- b) Immediate cesarean section
- c) Vacuum extraction
- d) Oxytocin infusion
- e) Apply fundal pressure

TOPIC II. DIAGNOSIS OF PREGNANCY. PHYSIOLOGICAL CHANGES DURING PREGNANCY.

Test questions:

1. Which of the following is a probable sign of pregnancy?
 - a) Fetal movement felt by the examiner
 - b) Chadwick's sign
 - c) Ultrasound confirmation
 - d) Positive hCG test
 - e) Presence of amniotic fluid
2. The most definitive method to confirm pregnancy is:
 - a) Doppler ultrasound detection of fetal heartbeat
 - b) Positive urine pregnancy test
 - c) Abdominal enlargement
 - d) Increased basal body temperature
 - e) Breast tenderness
3. A positive pregnancy test detects the presence of which hormone?
 - a) Progesterone
 - b) Human chorionic gonadotropin (hCG)
 - c) Estrogen
 - d) Luteinizing hormone
 - e) Follicle-stimulating hormone
4. Goodell's sign refers to:
 - a) Bluish discoloration of the cervix
 - b) Softening of the cervix
 - c) Enlargement of the uterus
 - d) Palpable fetal movement
 - e) Positive urine pregnancy test
5. The most accurate way to estimate gestational age in early pregnancy is:
 - a) Fundal height measurement
 - b) Last menstrual period (LMP)
 - c) Fetal heart rate detection
 - d) Crown-rump length on ultrasound
 - e) Maternal weight gain
6. At what gestational age does fetal heart rate become detectable by Doppler?
 - a) 4-5 weeks

- b) 6-8 weeks
- c) 10-12 weeks
- d) 16 weeks
- e) 20 weeks

7. Naegele's rule is used to calculate:

- a) Fetal weight
- b) Estimated due date (EDD)
- c) Fetal heart rate
- d) Uterine size
- e) Cervical dilation

8. The fundal height at 20 weeks of gestation is typically located at:

- a) The umbilicus
- b) The xiphoid process
- c) The symphysis pubis
- d) The level of the diaphragm
- e) The iliac crest

9. The earliest sign of pregnancy detected on ultrasound is:

- a) Fetal heartbeat
- b) Yolk sac
- c) Gestational sac
- d) Fetal limb buds
- e) Placental formation

10. During pregnancy, cardiac output:

- a) Decreases
- b) Increases
- c) Remains unchanged
- d) Increases only in the third trimester
- e) Decreases in the second trimester

11. The hormone responsible for maintaining pregnancy is:

- a) Estrogen
- b) Oxytocin
- c) Progesterone
- d) Prolactin
- e) Relaxin

12. What change occurs in maternal blood volume during pregnancy?

- a) Decreases
- b) Remains unchanged
- c) Increases by 30-50%
- d) Increases by 10%
- e) Doubles

13. Which hormone is responsible for uterine contraction inhibition during pregnancy?

- a) Estrogen
- b) Oxytocin
- c) Progesterone
- d) Relaxin
- e) Prolactin

14. During pregnancy, tidal volume:

- a) Increases
- b) Decreases
- c) Remains unchanged
- d) Increases only in the third trimester
- e) Increases only during labor

15. Which hormone is responsible for softening of ligaments and joints during pregnancy?

- a) Prolactin
- b) Relaxin
- c) Oxytocin
- d) Estrogen
- e) Human chorionic gonadotropin (hCG)

16. The respiratory rate during pregnancy:

- a) Increases
- b) Decreases
- c) Remains unchanged
- d) Varies significantly
- e) Stops momentarily during the second trimester

17. Physiological anemia of pregnancy is due to:

- a) Increased destruction of red blood cells
- b) Increased plasma volume compared to red cell mass
- c) Decreased iron absorption
- d) Hemolysis due to fetal-maternal blood interaction
- e) Decreased erythropoiesis

18. During pregnancy, systemic vascular resistance:

- a) Increases
- b) Decreases
- c) Remains unchanged
- d) Fluctuates randomly
- e) Increases only in the third trimester

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19. The most common cause of hyperpigmentation in pregnancy is:

- a) Increased cortisol
- b) Increased melanin production
- c) Dehydration
- d) Hyperthyroidism
- e) Iron deficiency

20. Which of the following is true about gastrointestinal changes in pregnancy?

- a) Gastric emptying increases
- b) Progesterone causes smooth muscle relaxation
- c) Esophageal sphincter tone increases
- d) Peristalsis increases
- e) Stomach acidity decreases

21. Which renal change is normal in pregnancy?

- a) Decreased glomerular filtration rate (GFR)
- b) Increased renal plasma flow
- c) Increased serum creatinine
- d) Decreased sodium retention
- e) Increased urinary frequency due to progesterone

22. What happens to insulin sensitivity during pregnancy?

- a) Increases
- b) Decreases
- c) Remains unchanged
- d) Varies each trimester
- e) Becomes absent

23. Which symptom is considered a positive sign of pregnancy?

- a) Morning sickness
- b) Uterine enlargement
- c) Fetal movement felt by the examiner
- d) Increased basal body temperature
- e) Chadwick's sign

24. Which test provides the earliest confirmation of pregnancy?

- a) Blood hCG test
- b) Urine pregnancy test
- c) Abdominal ultrasound
- d) Fundal height measurement
- e) Doppler fetal heart detection

25. When does implantation of the fertilized egg typically occur?

- a) Within 12 hours after fertilization
- b) 1-2 days after fertilization
- c) 6-12 days after ovulation
- d) At the start of the next menstrual cycle
- e) 4 weeks after fertilization

26. What happens to the maternal heart rate during pregnancy?

- a) Decreases
- b) Increases by 10-15 bpm
- c) Remains unchanged
- d) Drops significantly in the third trimester
- e) Doubles

27. What is the most common dermatologic change in pregnancy?

- a) Striae gravidarum
- b) Hyperpigmentation of the palms
- c) Acne
- d) Petechiae
- e) Telangiectasia

28. Which hormone is primarily responsible for breast enlargement and milk duct growth during pregnancy?

- a) Estrogen
- b) Progesterone
- c) Oxytocin
- d) Human placental lactogen
- e) Prolactin

29. During pregnancy, which of the following is a normal hematologic change?

- a) Increased hemoglobin concentration
- b) Increased white blood cell count
- c) Decreased blood volume
- d) Decreased clotting factors
- e) Decreased platelet count

30. Which symptom is considered a positive sign of pregnancy?

- a) Morning sickness
- b) Uterine enlargement
- c) Fetal movement felt by the examiner
- d) Increased basal body temperature
- e) Chadwick's sign

Situational tasks:

Case 1

A 24-year-old woman presents to the clinic with a missed period of 5 weeks. She reports nausea and breast tenderness but denies any abdominal pain or vaginal bleeding. A home urine pregnancy test was positive.

Questions:

1. What is the most definitive test to confirm her pregnancy?

- a) Serum β -hCG test
- b) Abdominal ultrasound
- c) Fundal height measurement
- d) Doppler fetal heart detection
- e) Pelvic examination

2. What is the earliest ultrasound finding in a normal pregnancy?

- a) Fetal pole
- b) Yolk sac
- c) Gestational sac
- d) Fetal heartbeat
- e) Placental formation

3. If this patient had right lower abdominal pain and a positive pregnancy test, which condition should be ruled out?

- a) Molar pregnancy
- b) Ectopic pregnancy
- c) Missed abortion
- d) Hydatidiform mole
- e) Threatened miscarriage

Case 2

A 27-year-old woman visits the clinic for her first prenatal visit. She has regular 28-day cycles, and her last menstrual period (LMP) was 8 weeks ago. She has no history of contraception use or irregular cycles.

Questions:

1. According to Naegele's rule, what is her estimated due date (EDD)?

- a) 9 months from today
- b) LMP + 7 days + 9 months
- c) LMP + 14 days + 10 months
- d) LMP + 7 days - 3 months + 1 year
- e) LMP + 21 days + 8 months

2. At what gestational age is the fetal heart first detected by Doppler?

- a) 6-8 weeks
- b) 8-10 weeks
- c) 10-12 weeks
- d) 14 weeks
- e) 20 weeks

3. If this patient had an unknown LMP, which test would be the most accurate for estimating gestational age?

- a) Fundal height measurement
- b) Crown-rump length on ultrasound
- c) Maternal serum α -fetoprotein
- d) Fetal heart rate monitoring
- e) Urine β -hCG test

Case 3

A 22-year-old woman presents to the clinic with nausea and breast tenderness. On pelvic examination, the cervix appears bluish, and the vaginal mucosa is softened.

Questions:

1. What is the term for the bluish discoloration of the cervix during pregnancy?

- a) Hegar's sign
- b) Chadwick's sign
- c) Goodell's sign
- d) Piskacek's sign
- e) Leopold's sign

2. What is the term for the softening of the cervix in pregnancy?

- a) Hegar's sign
- b) Chadwick's sign
- c) Goodell's sign
- d) Piskacek's sign
- e) McDonald's sign

3. What is the main hormone responsible for these changes?

- a) Estrogen
- b) Progesterone
- c) Oxytocin
- d) Human chorionic gonadotropin (hCG)
- e) Relaxin

Case 4

A 30-year-old pregnant woman at 28 weeks of gestation reports occasional dizziness when lying on her back. She denies chest pain or shortness of breath. Blood pressure is 110/70 mmHg, and heart rate is 95 bpm.

Questions:

1. What is the most likely cause of her symptoms?

- a) Gestational hypertension
- b) Supine hypotensive syndrome
- c) Pre-eclampsia
- d) Pulmonary embolism
- e) Iron deficiency anemia

2. What is the best advice for this patient?

- a) Lay flat on her back
- b) Increase water intake
- c) Sleep in the left lateral position
- d) Take iron supplements
- e) Elevate her legs while sleeping

3. What physiological cardiovascular change occurs during pregnancy?

- a) Increased systemic vascular resistance
- b) Decreased blood volume
- c) Increased cardiac output
- d) Increased hemoglobin levels
- e) Increased diastolic blood pressure

Case 5

A 32-year-old pregnant woman in her third trimester complains of shortness of breath, especially when lying down. Oxygen saturation is 98%, and lung examination is normal.

Questions:

1. What is the most likely explanation for her symptoms?

- a) Pulmonary embolism
- b) Physiological dyspnea of pregnancy
- c) Pneumonia
- d) Asthma exacerbation
- e) Cardiac failure

2. What physiological respiratory change occurs during pregnancy?

- a) Decreased tidal volume
- b) Increased minute ventilation
- c) Decreased respiratory rate
- d) Decreased oxygen consumption
- e) Increased airway resistance

3. Which hormone is primarily responsible for these respiratory changes?

- a) Estrogen
- b) Progesterone
- c) Oxytocin
- d) Prolactin
- e) Relaxin

Case 6

A 29-year-old woman at 22 weeks of gestation presents with dark patches on her face, especially on the cheeks, forehead, and nose. She denies itching or pain. She is otherwise healthy and has no history of skin disorders.

Questions:

1. What is the most likely diagnosis?

- a) Melasma (chloasma)
- b) Linea nigra
- c) Vitiligo
- d) Addison's disease
- e) Pityriasis versicolor

2. What is the main hormone responsible for this pigmentation?

- a) Progesterone
- b) Estrogen
- c) Oxytocin
- d) Prolactin
- e) Human placental lactogen

3. What is the best management for this condition?

- a) Sunscreen and reassurance
- b) Topical corticosteroids
- c) Oral antifungal treatment
- d) Laser therapy
- e) Skin biopsy

Case 7

A 26-year-old pregnant woman at 24 weeks gestation presents with heartburn and occasional regurgitation, especially after meals. She denies vomiting or weight loss.

Questions:

1. What is the most likely cause of her symptoms?

- a) Peptic ulcer disease
- b) Gastroesophageal reflux disease (GERD)
- c) Hyperemesis gravidarum
- d) Acute gastritis
- e) Hiatal hernia

2. What physiological change contributes to GERD in pregnancy?

- a) Increased esophageal sphincter tone
- b) Increased gastric acid production
- c) Decreased gastric motility due to progesterone
- d) Increased intra-abdominal pressure
- e) Increased small intestinal absorption

3. What is the first-line treatment for GERD in pregnancy?

- a) Antacids and lifestyle modification
- b) Proton pump inhibitors (PPIs)
- c) H₂-receptor antagonists
- d) Antibiotic therapy
- e) Prokinetic agents

Case 8

A 30-year-old woman at 34 weeks gestation presents with frequent urination. She denies dysuria, fever, or flank pain. Her urine dipstick test is normal.

Questions:

1. What is the most likely cause of her urinary frequency?

- a) Urinary tract infection (UTI)
- b) Physiological increase in renal plasma flow
- c) Bladder atony
- d) Diabetes mellitus
- e) Pre-eclampsia

2. What happens to glomerular filtration rate (GFR) during pregnancy?

- a) Increases
- b) Decreases
- c) Remains unchanged

- d) Fluctuates randomly
- e) Stops completely in the third trimester

3. What is the best initial test to rule out a urinary tract infection in pregnancy?

- a) Renal ultrasound
- b) Urinalysis and urine culture
- c) Serum creatinine
- d) Cystoscopy
- e) Blood urea nitrogen (BUN) test

Case 9

A 32-year-old woman at 30 weeks of pregnancy reports feeling excessively hot and experiencing mild palpitations. She has no previous thyroid disease. Her thyroid function tests show mildly increased total T4 and normal TSH levels.

Questions:

1. What is the most likely cause of her symptoms?

- a) Hyperthyroidism
- b) Euthyroid physiological change in pregnancy
- c) Graves' disease
- d) Hashimoto's thyroiditis
- e) Postpartum thyroiditis

2. Which hormone is responsible for transient thyroid stimulation in pregnancy?

- a) Estrogen
- b) Progesterone
- c) hCG
- d) Prolactin
- e) Relaxin

3. What is the best management for this patient?

- a) No treatment needed
- b) Start methimazole
- c) Thyroidectomy
- d) Beta-blockers
- e) Radioactive iodine therap

Case 10

A 28-year-old pregnant woman at 32 weeks gestation has a hemoglobin level of 10.2 g/dL. Her iron studies show low serum ferritin

and increased total iron-binding capacity. She denies excessive bleeding or other symptoms.

Questions:

1. What is the most likely diagnosis?

- a) Physiological anemia of pregnancy
- b) Iron deficiency anemia
- c) Aplastic anemia
- d) Hemolytic anemia
- e) Thalassemia

2. What is the main cause of physiological anemia in pregnancy?

- a) Increased plasma volume compared to red blood cell mass
- b) Decreased iron absorption
- c) Increased destruction of red blood cells
- d) Fetal blood cell consumption
- e) Increased erythropoietin production

3. What is the first-line treatment for this patient?

- a) Iron supplementation
- b) Blood transfusion
- c) Erythropoietin therapy
- d) Vitamin B12 injection
- e) Bone marrow biopsy

**TOPIC III. NORMAL LABOR. PHYSIOLOGICAL CHILDBIRTH.
NORMAL PUERPERIUM
CARRYING OUT A PERIOD OF PHYSIOLOGICAL AFTER
CHILBIRTH PERIOD. LACTATION**

1. What is the first stage of labor characterized by?

- a) Expulsion of the fetus
- b) Cervical dilation and effacement
- c) Delivery of the placenta
- d) Rupture of membranes
- e) Latent and active phases of labor

2. The second stage of labor begins with:

- a) Full cervical dilation
- b) Engagement of the fetal head
- c) Contractions every 10 minutes
- d) Crowning
- e) Complete dilation and ends with delivery of the fetus

3. The third stage of labor involves:

- a) Expulsion of the placenta
- b) Cervical effacement
- c) Descent of the fetal head
- d) Onset of uterine contractions
- e) Separation and delivery of the placenta

4. Which of the following is an early sign of labor?

- a) Uterine involution
- b) Lactation
- c) Expulsion of meconium
- d) Loss of fetal heart rate variability
- e) Bloody show

5. The average duration of the first stage of labor in a primigravida is:

- a) 2-4 hours
- b) 5-7 hours
- c) 10-12 hours
- d) 18-24 hours
- e) 12-14 hours

6. What is the most reliable indicator of active labor?

- a) Presence of contractions
- b) Cervical dilation of 4 cm

- c) Fetal descent into the pelvis
- d) Loss of mucus plug
- e) Regular painful contractions with progressive cervical dilation

7. Engagement of the fetal head means:

- a) The fetal head has passed through the cervix
- b) The fetal head is at station -1
- c) The fetal head is above the pelvic brim
- d) The fetal head is crowning
- e) The widest part of the fetal head has passed through the pelvic inlet

8. The mechanism of labor that allows the smallest diameter of the fetal head to pass through the birth canal is:

- a) Flexion
- b) Extension
- c) Internal rotation
- d) Descent
- e) Engagement and flexion

9. What is the normal fetal heart rate range during labor?

- a) 80-100 bpm
- b) 100-120 bpm
- c) 110-160 bpm
- d) 140-180 bpm
- e) 120-160 bpm

10. Which of the following is a contraindication for vaginal delivery?

- a) Vertex presentation
- b) Cephalopelvic disproportion
- c) Previous vaginal delivery
- d) Post-term pregnancy
- e) Complete placenta previa

11. The puerperium period lasts:

- a) 3 days
- b) 7 days
- c) 2 weeks
- d) 1 month
- e) 6 weeks postpartum

12. The uterus returns to its pre-pregnancy size by:

- a) 3 days postpartum
- b) 1 week postpartum
- c) 2 weeks postpartum

d) 4 weeks postpartum

e) 6 weeks postpartum

13. What is lochia?

a) Fluid-filled ovarian cyst

b) Amniotic fluid leakage

c) Normal postpartum vaginal discharge

d) Fetal waste products

e) Uterine shedding of blood and tissue postpartum

14. Which hormone primarily supports uterine involution?

a) Estrogen

b) Progesterone

c) Oxytocin

d) Prolactin

e) Relaxin

15. Lochia alba is characterized by:

a) Bright red blood

b) Heavy clotting

c) Foul-smelling discharge

d) Yellowish-white discharge

e) Serosanguineous discharge

16. Which hormone is responsible for milk production?

a) Oxytocin

b) Progesterone

c) Estrogen

d) Relaxin

e) Prolactin

17. Which hormone is responsible for milk ejection?

a) Prolactin

b) Estrogen

c) Progesterone

d) Cortisol

e) Oxytocin

18. What is colostrum?

a) Late-stage breast milk

b) First breast milk rich in antibodies

c) Milk from formula-fed infants

d) Milk produced after 2 weeks postpartum

e) Nutrient-deficient milk

19. The let-down reflex is triggered by:

- a) Pain
- b) Dehydration
- c) Stress
- d) Fatigue
- e) Suckling at the breast

20. Exclusive breastfeeding is recommended for:

- a) 2 months
- b) 4 months
- c) 6 months
- d) 9 months
- e) 6 months, with continued breastfeeding up to 2 years

21. The fetal station at 0 means the presenting part is at:

- a) Above the ischial spines
- b) Below the ischial spines
- c) The pelvic inlet
- d) The cervix
- e) The level of the ischial spines

22. The most common presentation for vaginal delivery is:

- a) Breech presentation
- b) Transverse lie
- c) Face presentation
- d) Shoulder presentation
- e) Cephalic (vertex) presentation

23. The normal frequency of uterine contractions during active labor is:

- a) 1 contraction every 10 minutes
- b) 2 contractions every 15 minutes
- c) 1 contraction every 5 minutes
- d) 5 contractions every 30 minutes
- e) 3-5 contractions every 10 minutes

24. Which of the following is NOT a cardinal movement of labor?

- a) Engagement
- b) Descent
- c) Extension
- d) Flexion
- e) Retraction

25. The most common cause of postpartum hemorrhage is:

- a) Retained placenta

- b) Uterine rupture
- c) Cervical laceration
- d) Coagulopathy
- e) Uterine atony

26. After delivery, the fundus of the uterus is usually at the level of the umbilicus at:

- a) 12 hours postpartum
- b) 24 hours postpartum
- c) 48 hours postpartum
- d) 72 hours postpartum
- e) Immediately after birth

27. What is the most common cause of maternal postpartum fever?

- a) Urinary tract infection
- b) Thrombophlebitis
- c) Endometritis
- d) Mastitis
- e) Wound infection

28. Lochia rubra lasts for approximately:

- a) 1 day
- b) 2-3 days
- c) 1 week
- d) 2 weeks
- e) 3 weeks

29. What is the most common cause of lactation failure in the first week postpartum?

- a) Insufficient glandular tissue
- b) Low prolactin levels
- c) Poor infant latching
- d) Delayed milk let-down
- e) Maternal dehydration

30. Which of the following is a contraindication to breastfeeding?

- a) Maternal fever
- b) Maternal use of acetaminophen
- c) Maternal use of antibiotics
- d) Maternal active tuberculosis
- e) HIV infection in a non-resource-limited setting

Situational tasks:

Case 1

A 26-year-old primigravida at 39 weeks of gestation is admitted to the labor ward with regular contractions every 5 minutes. On vaginal examination, her cervix is 4 cm dilated, fully effaced, and the fetal head is at -2 station. Her membranes are intact, and fetal heart rate is normal.

Questions:

1. What stage of labor is this patient in?

- a) First stage – latent phase
- b) First stage – active phase
- c) Second stage
- d) Third stage
- e) Fourth stage

2. What is the normal rate of cervical dilation in a primigravida during active labor?

- a) 0.5 cm per hour
- b) 1.2 cm per hour
- c) 1.5 cm per hour
- d) 2.5 cm per hour
- e) 3 cm per hour

3. Which of the following is the best management at this stage?

- a) Perform an emergency cesarean section
- b) Administer oxytocin immediately
- c) Encourage ambulation and monitor progress
- d) Perform artificial rupture of membranes
- e) Apply forceps to assist labor

Case 2

A 30-year-old multiparous woman is in active labor at 40 weeks gestation. Her cervix is fully dilated, and she has been pushing for 2 hours without delivery. The fetal heart rate is normal, and the fetal head is at +2 station.

Questions:

1. What is the most likely diagnosis?

- a) Normal labor
- b) Prolonged first stage of labor
- c) Prolonged second stage of labor
- d) Arrest of labor
- e) Uterine rupture

2. Which of the following is the best next step in management?

- a) Continue monitoring and allow more time
- b) Administer oxytocin and wait
- c) Perform vacuum or forceps-assisted delivery
- d) Prepare for cesarean section
- e) Encourage the patient to stop pushing

3. What is the most common cause of prolonged second stage of labor?

- a) Fetal macrosomia
- b) Preterm labor
- c) Breech presentation
- d) Multiple gestation
- e) Placental abruption

Case 3

A 28-year-old woman delivers a healthy baby vaginally. After 10 minutes, the placenta is expelled, but the patient continues to have heavy vaginal bleeding. Her uterus feels soft on palpation.

Questions:

1. What is the most likely cause of her bleeding?

- a) Retained placenta
- b) Uterine atony
- c) Cervical laceration
- d) Coagulopathy
- e) Uterine rupture

2. What is the first-line treatment for this condition?

- a) IV fluids and observation
- b) Blood transfusion
- c) Uterine massage and oxytocin administration
- d) Immediate hysterectomy
- e) Surgical exploration

3. Which of the following is a risk factor for uterine atony?

- a) Prolonged labor
- b) Oligohydramnios
- c) Low birth weight baby
- d) Preterm delivery
- e) Short second stage of labor

Case 4

A 25-year-old woman, 5 days postpartum, presents for routine follow-up. She reports mild cramping and lochia rubra. On examination, the uterus is firm and located midway between the umbilicus and pubic symphysis.

Questions:

1. What is the most likely diagnosis?

- a) Normal puerperium
- b) Endometritis
- c) Subinvolution of the uterus
- d) Retained products of conception
- e) Postpartum hemorrhage

2. What is the expected timeline for the uterus to return to its normal size postpartum?

- a) 1 week
- b) 2 weeks
- c) 4 weeks
- d) 6 weeks
- e) 8 weeks

3. What is lochia rubra?

- a) A clear discharge
- b) Bright red vaginal bleeding postpartum
- c) Thick yellow discharge
- d) Brownish-red discharge
- e) Watery pink discharge

Case 5

A 32-year-old woman, 3 days postpartum, presents with concerns about insufficient breast milk production. The baby is irritable after feeds. She has mild breast fullness but no engorgement.

Questions:

1. What is the most likely cause of her symptoms?

- a) Hyperprolactinemia
- b) Poor infant latching
- c) Mastitis
- d) Breast cancer
- e) Galactocele

2. What is the first step in management?

- a) Stop breastfeeding

- b) Start formula feeding
- c) Correct the infant's latch
- d) Prescribe antibiotics
- e) Perform a breast ultrasound

3. Which hormone is responsible for milk ejection?

- a) Prolactin
- b) Estrogen
- c) Progesterone
- d) Oxytocin
- e) Relaxin

Case 6

A 27-year-old woman at 38 weeks of gestation presents with a sudden gush of clear fluid from the vagina. She denies contractions but feels occasional fetal movements. On examination, the cervix is 2 cm dilated, and amniotic fluid is leaking.

Questions:

1. What is the most likely diagnosis?

- a) Preterm labor
- b) Premature rupture of membranes (PROM)
- c) Placental abruption
- d) Cord prolapse
- e) Oligohydramnios

2. What is the best initial management for this patient?

- a) Immediate cesarean section
- b) Induction of labor if no contractions occur within 12-24 hours
- c) Bed rest and waiting for spontaneous labor
- d) Administration of tocolytics
- e) Perform amnioinfusion

3. What is the most common complication of PROM?

- a) Preeclampsia
- b) Chorioamnionitis
- c) Fetal macrosomia
- d) Cord prolapse
- e) Polyhydramnios

Case 7

A 30-year-old primigravida at 41 weeks of gestation has been in labor for 12 hours. Her cervix is fully dilated, but the fetal head remains at -1

station. She has been pushing for 2 hours without progress. Fetal heart rate is normal.

Questions:

1. What is the most likely diagnosis?

- a) Prolonged latent phase
- b) Uterine atony
- c) Cephalopelvic disproportion (CPD)
- d) Normal labor progress
- e) Uterine rupture

2. What is the most appropriate next step in management?

- a) Continue pushing
- b) Perform vacuum extraction
- c) Perform cesarean section
- d) Administer oxytocin
- e) Wait for spontaneous delivery

3. What is a risk factor for CPD?

- a) Maternal obesity
- b) History of normal vaginal deliveries
- c) Small fetal head circumference
- d) Polyhydramnios
- e) Short second stage of labor

Case 8

A 34-year-old woman delivers a healthy baby vaginally. After 30 minutes, the placenta has not yet been expelled. She is stable with mild vaginal bleeding. The uterus remains soft.

Questions:

1. What is the most likely diagnosis?

- a) Normal third stage of labor
- b) Placenta accreta
- c) Retained placenta
- d) Uterine atony
- e) Postpartum hemorrhage

2. What is the best initial management?

- a) Perform manual removal of the placenta
- b) Administer broad-spectrum antibiotics
- c) Start oxytocin infusion and observe
- d) Perform a hysterectomy
- e) Wait for spontaneous expulsion

3. What is a risk factor for retained placenta?

- a) Preterm birth
- b) Multiparity
- c) Previous cesarean section
- d) Low birth weight
- e) Rapid labor

Case 9

A 28-year-old woman, 3 weeks postpartum, presents with fever, breast pain, and redness on the left breast. She has been breastfeeding her baby exclusively. On examination, there is a tender, swollen, erythematous area on the left breast.

Questions:

1. What is the most likely diagnosis?

- a) Engorgement
- b) Mastitis
- c) Breast abscess
- d) Fibroadenoma
- e) Galactorrhea

2. What is the most common causative organism?

- a) *Escherichia coli*
- b) *Streptococcus pneumoniae*
- c) *Staphylococcus aureus*
- d) *Candida albicans*
- e) *Pseudomonas aeruginosa*

3. What is the best management?

- a) Stop breastfeeding and observe
- b) Apply warm compresses only
- c) Start antibiotics and continue breastfeeding
- d) Perform surgical drainage immediately
- e) Prescribe antifungal therapy

Case 10

A 25-year-old woman, 4 weeks postpartum, reports persistent sadness, difficulty sleeping, and lack of interest in caring for her baby. She denies suicidal thoughts. She has no prior psychiatric history.

Savollar:

1. What is the most likely diagnosis?

- a) Postpartum blues
- b) Postpartum depression

- c) Postpartum psychosis
- d) Generalized anxiety disorder
- e) Sleep deprivation

2. What is the best initial management?

- a) Start selective serotonin reuptake inhibitors (SSRIs)
- b) Hospitalization
- c) Electroconvulsive therapy
- d) Reassurance only
- e) Start benzodiazepines

3. What is a risk factor for postpartum depression?

- a) Multiparity
- b) History of previous depression
- c) Vaginal delivery
- d) High socioeconomic status
- e) Short duration of labor

**TOPIC. IV PRETERM LABOR. PRELABOR RUPTURE OF THE
MEMBRANE (PROM)
MANAGEMENT. PROLONGED AND POST-TERM PREGNANCY.
INTRAUTERINE FETAL DEATH (IUFD)**

Test questions:

- 1. Which of the following is a major risk factor for preterm labor?**
 - a) High BMI
 - b) Previous preterm birth
 - c) Advanced maternal age
 - d) Multiparity
 - e) Oligohydramnios
- 2. Which medication is used to suppress preterm labor?**
 - a) Oxytocin
 - b) Magnesium sulfate
 - c) Misoprostol
 - d) Ergonovine
 - e) Methylergonovine
- 3. Which drug is given to enhance fetal lung maturity in preterm labor?**
 - a) Magnesium sulfate
 - b) Oxytocin
 - c) Betamethasone
 - d) Indomethacin
 - e) Misoprostol
- 4. At what gestational age does corticosteroid administration for fetal lung maturity provide the greatest benefit?**
 - a) Before 24 weeks
 - b) 24-34 weeks
 - c) 35-37 weeks
 - d) After 37 weeks
 - e) At term only
- 5. What is the mechanism of action of tocolytic drugs?**
 - a) Stimulate uterine contractions
 - b) Relax uterine smooth muscle
 - c) Increase fetal lung maturity
 - d) Induce cervical ripening

e) Increase uterine blood flow

6. Which infection is most commonly associated with preterm labor?

a) Pyelonephritis

b) Group B Streptococcus

c) Bacterial vaginosis

d) Chlamydia

e) Syphilis

7. A pregnant woman at 28 weeks gestation presents with regular contractions and cervical dilation. What is the best next step?

a) Immediate cesarean delivery

b) Administer tocolytics and corticosteroids

c) Induce labor

d) Perform amniotomy

e) Prescribe bed rest

8. Prelabor rupture of membranes (PROM) is defined as rupture of membranes:

a) Before contractions begin

b) During the second stage of labor

c) At 42 weeks

d) After active labor starts

e) Before 20 weeks gestation

9. The most common complication of prolonged PROM is:

a) Fetal macrosomia

b) Chorioamnionitis

c) Placental abruption

d) Polyhydramnios

e) Cord prolapse

10. Which test is used to confirm PROM?

a) Glucose tolerance test

b) Nitrazine test

c) Kleihauer-Betke test

d) Coombs test

e) Doppler ultrasound

11. What is the most appropriate management of PROM at 32 weeks with no signs of infection?

a) Immediate induction of labor

b) Administer corticosteroids and monitor

c) Perform emergency cesarean section

- d) Give oxytocin immediately
- e) Prescribe bed rest until term

12. A post-term pregnancy is defined as a pregnancy that extends beyond:

- a) 37 weeks
- b) 39 weeks
- c) 40 weeks
- d) 42 weeks
- e) 44 weeks

13. The most common complication of post-term pregnancy is:

- a) Preterm birth
- b) Fetal growth restriction
- c) Macrosomia
- d) Placenta previa
- e) Polyhydramnios

14. What is the preferred management for a post-term pregnancy at 41 weeks?

- a) Elective cesarean section
- b) Expectant management
- c) Induction of labor
- d) Administration of progesterone
- e) Preterm delivery

15. What is the best method for assessing fetal well-being in post-term pregnancy?

- a) Amniotic fluid index (AFI)
- b) Urine protein measurement
- c) Hemoglobin level
- d) Cervical dilation check
- e) Blood glucose monitoring

16. IUFD is defined as fetal death occurring:

- a) Before 12 weeks
- b) Between 12-20 weeks
- c) After 20 weeks
- d) During delivery
- e) Postpartum

17. What is the most common cause of IUFD?

- a) Maternal diabetes
- b) Umbilical cord accidents
- c) Placental insufficiency

- d) Maternal obesity
- e) Fetal genetic abnormalities

18. Which clinical sign is most suggestive of IUFD?

- a) Hyperactive fetal movements
- b) Decreased maternal weight gain
- c) Absence of fetal heart tones
- d) Maternal fever
- e) Decreased hemoglobin

19. The most appropriate management of IUFD after 24 weeks is:

- a) Immediate cesarean section
- b) Induction of labor
- c) Bed rest and monitoring
- d) Administration of corticosteroids
- e) Expectant management for 2 weeks

20. A woman at 30 weeks gestation presents with uterine contractions and a cervix that is 3 cm dilated. Which of the following is the best initial management?

- a) Administer oxytocin to induce labor
- b) Immediate cesarean delivery
- c) Administer tocolytics and corticosteroids
- d) Perform amniotomy
- e) Monitor and discharge the patient

21. What is the main benefit of magnesium sulfate in preterm labor management?

- a) Induction of labor
- b) Fetal lung maturation
- c) Neuroprotection against cerebral palsy
- d) Increasing maternal blood pressure
- e) Enhancing fetal movement

22. Which of the following is an absolute contraindication for tocolysis?

- a) Preterm labor at 30 weeks
- b) Fetal distress
- c) Twin pregnancy
- d) History of preterm birth
- e) No cervical dilation

23. A woman at 33 weeks gestation has preterm contractions but no cervical change. What is the best next step?

- a) Immediate cesarean delivery

- b) Discharge home with no intervention
- c) Administer corticosteroids and observe
- d) Induce labor
- e) Perform fetal scalp sampling

24. A pregnant woman at 36 weeks presents with a sudden gush of fluid from the vagina. The fluid tests positive on the Nitrazine test. Which of the following is the best next step?

- a) Induce labor
- b) Perform an emergency cesarean section
- c) Administer tocolytics
- d) Discharge home and monitor
- e) Perform fetal lung maturity testing

25. A woman at 30 weeks gestation has prelabor rupture of membranes (PPROM). There is no sign of infection. What is the most appropriate management?

- a) Immediate delivery
- b) Expectant management with antibiotics and corticosteroids
- c) Induction of labor
- d) Cesarean delivery
- e) Perform a digital vaginal exam

26. Which antibiotic regimen is recommended for prolonging latency in PPRM?

- a) Azithromycin only
- b) Penicillin and amoxicillin
- c) Ampicillin and erythromycin
- d) Doxycycline and clindamycin
- e) Cephalixin only

27. The most common complication of prolonged pregnancy (>42 weeks) is:

- a) Preterm birth
- b) Polyhydramnios
- c) Meconium aspiration syndrome
- d) Maternal hypoglycemia
- e) Fetal anencephaly

28. Which fetal monitoring test is most appropriate for post-term pregnancy surveillance?

- a) Serum β -hCG levels
- b) Amniotic fluid index and non-stress test
- c) Doppler study of maternal renal arteries

d) Maternal estradiol levels

e) Fetal fibronectin test

29. What is the recommended management for IUFD at 34 weeks gestation?

a) Immediate cesarean section

b) Expectant management for one month

c) Induction of labor

d) Perform MRI before any intervention

e) Perform fetal blood transfusion

30. A woman at 30 weeks gestation has prelabor rupture of membranes (PPROM). There is no sign of infection. What is the most appropriate management?

a) Immediate delivery

b) Expectant management with antibiotics and corticosteroids

c) Induction of labor

d) Cesarean delivery

e) Perform a digital vaginal exam

Situational tasks:

Case 1

Chief complaint and history: A 28-year-old primigravida at 30 weeks of gestation presents with increasing lower abdominal pain, backache, and increased vaginal discharge. No history of vaginal bleeding or rupture of membranes. No chronic diseases, and the pregnancy has been uneventful so far. Vital signs: Temperature: 36.8°C, blood pressure (BP): 110/70 mmHg, pulse: 90 bpm, fetal movements present. Obstetric examination: Uterine size corresponds to gestational age, increased uterine tone, vaginal examination reveals cervix 2.5 cm dilated, 60% effaced, fetal head at -2 station, intact membranes.

Questions:

1. What is the most likely diagnosis?

a) Normal pregnancy

b) Urinary tract infection

c) Preterm labor

d) Placental abruption

e) Cephalopelvic disproportion

2. What is the first-line management?

a) Indomethacin to delay labor

b) Betamethasone and tocolytics

- c) Antibiotics and discharge home
- d) Oxygen therapy and immediate cesarean section
- e) Doppler ultrasound to assess fetal circulation

3. What does the obstetric examination indicate about labor progression?

- a) No signs of labor
- b) Early stage of labor
- c) Active phase of labor
- d) Preeclampsia signs
- e) Normal findings

Case 2

Chief complaint and history: A 32-year-old woman at 32 weeks of gestation presents with a sudden gush of fluid from the vagina 12 hours ago, but no pain. Fetal movements are normal. Vital signs: BP: 120/80 mmHg, pulse: 88 bpm, temperature: 37.1°C. Obstetric examination: Uterine size corresponds to gestational age, vaginal examination shows cervix 2 cm dilated, 30% effaced, Nitrazine test positive, fetal heart rate: 145 bpm, reactive, no signs of infection.

Questions:

1. What is the most likely diagnosis?

- a) Preterm labor
- b) Prelabor rupture of membranes (PROM)
- c) Emergency cesarean section indication
- d) Normal pregnancy
- e) Fetal distress)

2. What is the best management approach?

- a) Immediate delivery
- b) Administer progesterone to delay labor
- c) Hospitalization with antibiotics and corticosteroids
- d) Induction of labor with oxytocin
- e) Perform cesarean section

3. What is the most common complication of PROM?

- a) Chorioamnionitis
- b) Cephalopelvic disproportion
- c) Uterine atony
- d) Gestational diabetes
- e) Extra-genital pathology

Case 3

Chief complaint and history: A 35-week pregnant woman reports no fetal movements for the past 24 hours. No vaginal bleeding or fluid leakage. Vital signs: BP: 125/85 mmHg, pulse: 76 bpm, temperature: 36.7°C. Obstetric examination: Fundal height is smaller than expected, no fetal heart tones on Doppler, ultrasound confirms absence of fetal cardiac activity.

Questions:

1. What is the most likely diagnosis?

- a) Gestational diabetes
- b) Intrauterine fetal death (IUID)
- c) Preeclampsia
- d) Active labor
- e) Fetal malpresentation

2. What is the recommended management?

- a) Emergency cesarean section
- b) Induction of labor
- c) Expectant management for one week
- d) D-dimer testing
- e) Hormonal therapy

3. What is the most common cause of IUID?

- a) Fetal genetic abnormalities
- b) Gestational diabetes
- c) Maternal stress
- d) Macrosomia
- e) Fetal malpresentation

Case 4

Chief complaint and history: A 33-year-old woman at 42 weeks gestation reports reduced fetal movements over the last 12 hours. Non-stress test shows late decelerations. Vital signs: BP: 130/85 mmHg, pulse: 85 bpm, temperature: 36.9°C. Obstetric examination: Uterus corresponds to 42 weeks gestation, oligohydramnios noted on ultrasound, fetal heart rate 110 bpm.

Questions:

1. What is the most likely diagnosis?

- a) Normal post-term pregnancy
- b) Fetal distress due to placental insufficiency
- c) Polyhydramnios

d) Multiple gestation

e) Macrosomia

2. What is the best management?

a) Expectant management

b) Induction of labor

c) Immediate cesarean section

d) Administer tocolytics

e) Perform fetal MRI

3. What is the most common fetal complication of post-term pregnancy?

a) Preterm birth

b) Meconium aspiration syndrome

c) Neural tube defects

d) Intrauterine growth restriction

e) Twin-to-twin transfusion

Case 5

Chief complaint and history: A 29-year-old woman at 32 weeks gestation with a twin pregnancy presents with regular contractions and a cervical dilation of 2 cm. Vital signs: BP: 118/76 mmHg, pulse: 92 bpm, temperature: 37°C. Obstetric examination: Uterine size is larger than expected for gestational age, fetal heart rates normal for both twins, vaginal examination confirms soft cervix with 50% effacement.

Questions:

1. What is the most appropriate initial management?

a) Immediate cesarean delivery

b) Administer tocolytics and corticosteroids

c) Perform amniotomy

d) Perform fetal scalp pH testing

e) Induce labor

2. What is the most common complication of twin pregnancy?

a) Macrosomia

b) Post-term pregnancy

c) Preterm labor

d) Shoulder dystocia

e) Uterine rupture

3. Which medication provides neuroprotection in preterm twin pregnancy?

a) Betamethasone

- b) Magnesium sulfate
- c) Indomethacin
- d) Oxytocin
- e) Terbutaline

Case 6

Chief complaint and history: A 26-year-old woman at 31 weeks gestation presents with lower abdominal pain, fever, and foul-smelling vaginal discharge. She also reports painful contractions every 7 minutes. No previous pregnancies, no chronic illnesses. Vital signs: BP: 115/75 mmHg, pulse: 102 bpm, temperature: 38.5°C. Obstetric examination: Uterine size corresponds to gestational age, uterus is tender on palpation, vaginal examination reveals cervix 3 cm dilated, 70% effaced, fetal heart rate: 170 bpm (tachycardia).

Questions:

1. What is the most likely diagnosis?

- a) Preterm labor with chorioamnionitis
- b) Urinary tract infection
- c) Preeclampsia
- d) Placental abruption
- e) Gestational diabetes

2. What is the best next step in management?

- a) Administer tocolytics and corticosteroids
- b) Immediate induction of labor
- c) Prescribe antibiotics and discharge home
- d) Perform emergency cesarean section
- e) Monitor for 24 hours

3. Which organism is most commonly associated with chorioamnionitis?

- a) Group B Streptococcus
- b) Escherichia coli
- c) Mycoplasma
- d) Chlamydia trachomatis
- e) Neisseria gonorrhoeae

Case 7

Chief complaint and history: A 30-year-old woman at 29 weeks gestation presents with a sudden gush of fluid from the vagina. She denies contractions, fever, or bleeding. Vital signs: BP: 118/78 mmHg, pulse: 90

bpm, temperature: 37°C. Obstetric examination: Uterus corresponds to gestational age, Nitrazine test positive, cervix closed, fetal heart rate: 150 bpm (normal), no signs of infection.

Questions:

1. What is the best initial management?

- a) Immediate induction of labor
- b) Tocolysis and corticosteroids
- c) Cesarean section
- d) Perform digital cervical exam
- e) Outpatient monitoring

2. What is the major risk of prelabor rupture of membranes at 29 weeks?

- a) Polyhydramnios
- b) Uterine rupture
- c) Chorioamnionitis
- d) Post-term pregnancy
- e) Fetal macrosomia

3. Which antibiotic regimen is recommended for prolonging latency in PPRM?

- a) Azithromycin only
- b) Penicillin and amoxicillin
- c) Ampicillin and erythromycin
- d) Doxycycline and clindamycin
- e) Cephalexin only

Case 8

Chief complaint and history: A 33-year-old woman at 41+5 weeks gestation presents for evaluation. She denies contractions but reports reduced fetal movements. Vital signs: BP: 120/80 mmHg, pulse: 85 bpm, temperature: 36.8°C. Obstetric examination: Fundal height corresponds to gestational age, non-stress test shows decreased variability, amniotic fluid index (AFI) is 3 cm (oligohydramnios), fetal heart rate: 125 bpm.

Questions:

1. What is the most likely diagnosis?

- a) Normal post-term pregnancy
- b) Oligohydramnios with fetal distress
- c) Polyhydramnios
- d) Twin pregnancy
- e) Macrosomia

2. What is the best management?

- a) Expectant management
- b) Induction of labor
- c) Immediate cesarean section
- d) Administer tocolytics
- e) Perform fetal MRI

3. What is the most common fetal complication of post-term pregnancy?

- a) Preterm birth
- b) Meconium aspiration syndrome
- c) Neural tube defects
- d) Intrauterine growth restriction
- e) Twin-to-twin transfusion

Case 9

Chief complaint and history: A 28-year-old woman at 36 weeks gestation presents with no fetal movements for the past 24 hours. No vaginal bleeding or contractions. Vital signs: BP: 122/82 mmHg, pulse: 78 bpm, temperature: 36.9°C. Obstetric examination: Fundal height is smaller than expected, no fetal heart tones on Doppler, ultrasound confirms absence of fetal cardiac activity.

Questions:

1. What is the most appropriate next step?

- a) Immediate cesarean section
- b) Induction of labor
- c) Perform amniotomy
- d) Perform emergency MRI
- e) Expectant management for one week

2. What is the most common maternal complication following IUFD?

- a) Sepsis
- b) Disseminated intravascular coagulation (DIC)
- c) Preeclampsia
- d) Polyhydramnios
- e) Amniotic fluid embolism

3. What is the most common cause of IUFD?

- a) Maternal hypertension
- b) Umbilical cord accident
- c) Fetal aneuploidy

- d) Maternal hyperthyroidism
- e) Fetal arrhythmia

Case 10

Chief complaint and history: A 29-year-old woman at 32 weeks gestation with a twin pregnancy presents with regular contractions and cervical dilation of 2 cm. Vital signs: BP: 118/76 mmHg, pulse: 92 bpm, temperature: 37°C. Obstetric examination: Uterus is larger than expected for gestational age, fetal heart rates are normal for both twins, vaginal examination confirms soft cervix with 50% effacement.

Questions:

1. What is the most appropriate initial management?

- a) Immediate cesarean delivery
- b) Administer tocolytics and corticosteroids
- c) Perform amniotomy
- d) Perform fetal scalp pH testing
- e) Induce labor

2. What is the most common complication of twin pregnancy?

- a) Macrosomia
- b) Post-term pregnancy
- c) Preterm labor
- d) Shoulder dystocia
- e) Uterine rupture

3. Which medication provides neuroprotection in preterm twin pregnancy?

- a) Betamethasone
- b) Magnesium sulfate
- c) Indomethacin
- d) Oxytocin
- e) Terbutaline

TOPIC. 5 THE TERM NEWBORN INFANT. PHYSICAL FEATURES OF THE NEWBORN. IMMEDIATE. CARE OF THE NEWBORN. INFANT FEEDING. BREASTFEEDING CHILDHOOD IMMUNIZATION PROGRAM.

Test questions:

1. What is the normal weight range of a term newborn infant?

- a) 1.5 - 2.5 kg
- b) 2.5 - 4.0 kg
- c) 4.0 - 5.0 kg
- d) 1.0 - 2.0 kg
- e) 3.5 - 5.5 kg

2. What is the normal heart rate of a newborn infant?

- a) 60 - 100 bpm
- b) 120 - 160 bpm
- c) 80 - 110 bpm
- d) 100 - 140 bpm
- e) 140 - 180 bpm

3. What is the normal respiration rate for a newborn?

- a) 10 - 20 breaths per minute
- b) 40 - 60 breaths per minute
- c) 30 - 50 breaths per minute
- d) 60 - 80 breaths per minute
- e) 20 - 40 breaths per minute

4. What is vernix caseosa?

- a) A skin infection in newborns
- b) A type of birthmark
- c) A protective, waxy coating on the skin of newborns
- d) A fontanelle in the skull
- e) A part of the umbilical cord

5. What is lanugo?

- a) A hormone affecting growth
- b) Soft, fine hair covering the newborn's body
- c) A type of reflex in newborns
- d) A sign of jaundice
- e) A fetal circulation disorder

6. What is the normal head circumference of a newborn?

- a) 25 - 30 cm

- b) 30 - 35 cm
- c) 35 - 40 cm
- d) 40 - 45 cm
- e) 20 - 25 cm

7. What is the Apgar score used for?

- a) Measuring a newborn's reflexes
- b) Evaluating a newborn's condition at birth
- c) Assessing the newborn's weight
- d) Detecting congenital abnormalities
- e) Checking maternal health

8. When is the first dose of hepatitis B vaccine given to newborns?

- a) At birth
- b) At 2 months
- c) At 6 months
- d) At 1 year
- e) At 5 years

9. What is colostrum?

- a) The first milk produced by the mother
- b) A type of infant formula
- c) A vitamin supplement
- d) A disease affecting newborns
- e) An infant vaccine

10. Which of the following is NOT an advantage of breastfeeding?

- a) Provides antibodies
- b) Enhances mother-infant bonding
- c) Prevents maternal anemia
- d) Reduces risk of infections
- e) Contains all essential nutrients

11. What is the Moro reflex?

- a) A feeding reflex
- b) A startle reflex in newborns
- c) A grasping reflex
- d) A rolling reflex
- e) A stepping reflex

12. What is meconium?

- a) The first stool of a newborn
- b) A bacterial infection
- c) A vitamin supplement
- d) A type of baby formula
- e) A premature birth complication

13. Which vaccine protects against tuberculosis?

- a) Hepatitis B vaccine
- b) DTP vaccine
- c) BCG vaccine
- d) MMR vaccine
- e) Polio vaccine

14. What is jaundice in newborns caused by?

- a) Low oxygen levels
- b) Immature liver function
- c) Vitamin deficiency
- d) Dehydration
- e) Genetic disorder

15. Which immunization protects against measles?

- a) BCG
- b) MMR
- c) Hepatitis B
- d) DTP
- e) Rotavirus vaccine

16. When is the first DTP vaccine given?

- a) At birth
- b) 6 weeks
- c) 6 months
- d) 1 year
- e) 2 years

17. What is the normal temperature range for a newborn?

- a) 35.0 - 35.5°C
- b) 36.5 - 37.5°C
- c) 37.5 - 38.5°C
- d) 34.0 - 35.0°C
- e) 39.0 - 40.0°C

18. What is the function of fontanelles?

- a) Protect against infections
- b) Help in brain growth and skull flexibility
- c) Assist in breathing
- d) Regulate body temperature
- e) Improve blood circulation

19. What is the first step in newborn resuscitation?

- a) Chest compressions
- b) Suctioning the airway

- c) Giving oxygen
- d) Checking heart rate
- e) Administering medications

20. Which vitamin is given at birth to prevent bleeding?

- a) Vitamin A
- b) Vitamin B12
- c) Vitamin K
- d) Vitamin D
- e) Vitamin E

21. When is the first polio vaccine given?

- a) At birth
- b) At 6 months
- c) At 1 year
- d) At 2 years
- e) At 3 months

22. What is the main benefit of kangaroo mother care?

- a) Helps in digestion
- b) Improves weight gain and temperature regulation
- c) Prevents infections
- d) Enhances lung function
- e) Speeds up walking

23. What is the main energy source in breast milk?

- a) Proteins
- b) Carbohydrates (lactose)
- c) Fats
- d) Minerals
- e) Vitamins

24. What is the purpose of newborn screening tests?

- a) Detect metabolic and genetic disorders early
- b) Check for infections
- c) Assess heart function
- d) Evaluate lung maturity
- e) Measure blood pressure

25. What is the most common cause of respiratory distress in preterm newborns?

- a) Meconium aspiration
- b) Pneumonia
- c) Congenital heart defect
- d) Surfactant deficiency
- e) Jaundice

26. What is the recommended exclusive breastfeeding duration by WHO?

- a) 3 months
- b) 4 months
- c) 6 months
- d) 9 months
- e) 12 months

27. Which vaccine protects against diphtheria, tetanus, and pertussis?

- a) BCG
- b) MMR
- c) DTP
- d) Hepatitis B
- e) Rotavirus vaccine

28. What is the best way to prevent sudden infant death syndrome (SIDS)?

- a) Place the baby on their stomach to sleep
- b) Co-sleep with the baby
- c) Use soft bedding and pillows
- d) Put the baby to sleep on their back
- e) Keep the baby swaddled at all times

29. When should complementary feeding be introduced to an infant's diet?

- a) Before 3 months
- b) At 4 months
- c) At 6 months
- d) At 9 months
- e) After 12 months

30. What is the purpose of skin-to-skin contact after birth?

- a) Helps baby's vision development
- b) Lowers risk of jaundice
- c) Enhances bonding and stabilizes body temperature
- d) Prevents colic
- e) Speeds up first bowel movement

Situational tasks:

Case 1

Chief complaint and history: A full-term male newborn is delivered via spontaneous vaginal delivery to a 26-year-old mother. The baby cries weakly, has nasal flaring, intercostal retractions, and a respiratory rate of 68 breaths per minute. The amniotic fluid was clear, and Apgar scores were 6 at 1 minute and 8 at 5 minutes. Vital signs: HR: 150 bpm, RR: 68 breaths/min, SpO₂: 89% on room air. Neonatal examination: Nasal flaring, mild subcostal retractions, clear lung sounds, no cyanosis.

Questions:

1. What is the most likely diagnosis?

- a) Neonatal pneumonia
- b) Transient tachypnea of the newborn (TTN)
- c) Meconium aspiration syndrome
- d) Respiratory distress syndrome
- e) Congenital heart diseases

2. What is the best initial management?

- a) Immediate intubation
- b) Oxygen therapy via nasal cannula
- c) Empiric antibiotics
- d) Surfactant administration
- e) Immediate chest X-ray

3. What is the pathophysiology of TTN?

- a) Immature surfactant production
- b) Pulmonary infection
- c) Delayed clearance of fetal lung fluid
- d) Alveolar collapse due to meconium aspiration
- e) Congenital airway anomaly

Case 2

Chief complaint and history: A 3-day-old term newborn presents with yellow discoloration of the skin and sclera. The infant is breastfeeding well, has no fever, and no signs of dehydration. Vital signs: HR: 140 bpm, RR: 45 breaths/min, SpO₂: 98%. Neonatal examination: Yellowish skin discoloration, normal stool and urine output, no hepatosplenomegaly.

Questions:

1. What is the most likely diagnosis?

- a) Pathologic neonatal jaundice

- b) Breastfeeding jaundice
- c) Biliary atresia
- d) Neonatal sepsis
- e) Congenital hypothyroidism

2. What is the best initial management?

- a) Stop breastfeeding and give formula
- b) Increase breastfeeding frequency
- c) Exchange transfusion
- d) Immediate phototherapy
- e) Start IV fluids

3. What is the primary cause of breastfeeding jaundice?

- a) ABO incompatibility
- b) Delayed milk production and decreased bilirubin elimination
- c) Hemolysis of fetal red blood cells
- d) Liver enzyme deficiency
- e) Hepatic failure

Case 3

Chief complaint and history: A full-term infant born to a mother with gestational diabetes is noted to be jittery, irritable, and lethargic at 3 hours of life. The baby was delivered via normal vaginal delivery, Apgar scores were 8 and 9 at 1 and 5 minutes. Vital signs: HR: 145 bpm, RR: 50 breaths/min, SpO₂: 98%. Neonatal examination: Poor suck reflex, jitteriness, normal tone.

Questions:

1. What is the most likely diagnosis?

- a) Neonatal hypoglycemia
- b) Neonatal sepsis
- c) Hypocalcemia
- d) Hyperbilirubinemia
- e) Neonatal encephalopathy

2. What is the best initial management?

- a) Immediate IV dextrose
- b) Formula feeding
- c) Keep infant NPO and monitor
- d) Start phototherapy
- e) Exchange transfusion

3. What is the most common cause of neonatal hypoglycemia in this scenario?

- a) Poor feeding
- b) Increased insulin production due to maternal diabetes
- c) Delayed liver enzyme maturation
- d) Sepsis
- e) Congenital adrenal hyperplasia

Case 4

Chief complaint and history: A 5-day-old term newborn presents with poor latch, irritability, and weight loss of 8% from birth weight. The mother is a first-time mother struggling with breastfeeding. **Vital signs:** HR: 142 bpm, RR: 46 breaths/min, SpO₂: 99%. **Neonatal examination:** Mild dehydration, no jaundice, no signs of infection.

Questions:

1. What is the most likely diagnosis?

- a) Breastfeeding failure jaundice
- b) Neonatal dehydration
- c) Failure to thrive
- d) Normal weight loss pattern
- e) Lactose intolerance

2. What is the best initial management?

- a) Encourage more frequent breastfeeding
- b) Start formula supplementation
- c) Administer IV fluids
- d) Delay feeding for 24 hours
- e) Give glucose water

3. What is the expected weight loss in the first week of life?

- a) 1-2%
- b) 3-4%
- c) 5-7%
- d) 8-10%
- e) >10%

Case 5

Chief complaint and history: A 2-day-old term newborn is brought for routine newborn care. The mother asks about vaccines recommended at birth. The baby is healthy, breastfeeding well, and has no jaundice or infection. **Vital signs:** HR: 140 bpm, RR: 45 breaths/min, SpO₂: 100%.

Questions:

1. What vaccines should this newborn receive before discharge?

- a) BCG, Hepatitis B, and OPV
- b) MMR and DTP
- c) Rotavirus and pneumococcal vaccine
- d) Hib and varicella
- e) Influenza and polio

2. What is the purpose of the Hepatitis B vaccine at birth?

- a) Prevent transmission from mother to baby
- b) Strengthen the immune system
- c) Prevent future jaundice
- d) Prevent respiratory infections
- e) Promote growth

3. When should the second dose of Hepatitis B vaccine be given?

- a) 1 week
- b) 1 month
- c) 6 months
- d) 12 months
- e) 2 years

Case 6

Chief complaint and history: A full-term male newborn is delivered via vaginal delivery after prolonged labor. The amniotic fluid was meconium-stained. The baby is not crying at birth, has weak muscle tone, and gasping respirations. Apgar scores: 4 at 1 minute, 6 at 5 minutes. Vital signs: HR: 100 bpm, RR: 40 breaths/min, SpO₂: 85% on room air. Neonatal examination: Weak cry, nasal flaring, intercostal retractions, grunting, decreased breath sounds bilaterally.

Questions:

1. What is the most likely diagnosis?

- a) Transient tachypnea of the newborn
- b) Neonatal pneumonia
- c) Meconium aspiration syndrome
- d) Neonatal sepsis
- e) Persistent pulmonary hypertension of the newborn

2. What is the most appropriate initial management?

- a) Immediate suctioning of the trachea and oxygen therapy
- b) Routine suctioning of the mouth and nose only
- c) Immediate chest compressions

- d) Empiric antibiotic therapy
- e) IV glucose administration

3. What is a major complication of meconium aspiration syndrome?

- a) Hypoglycemia
- b) Persistent pulmonary hypertension
- c) Neonatal jaundice
- d) Congenital heart disease
- e) Neonatal anemia

Case 7

Chief complaint and history: A full-term newborn (40 weeks gestation) has not passed meconium within the first 48 hours of life. The infant is feeding poorly and has abdominal distension. Vital signs: HR: 140 bpm, RR: 42 breaths/min, SpO₂: 99%. Neonatal examination: Abdominal distension, no anal fissures, rectal examination reveals an empty rectum.

Questions:

1. What is the most likely diagnosis?

- a) Normal variation
- b) Hirschsprung disease
- c) Cystic fibrosis
- d) Necrotizing enterocolitis
- e) Neonatal sepsis

2. What is the best initial diagnostic test?

- a) Abdominal ultrasound
- b) Rectal biopsy
- c) X-ray of the abdomen
- d) Fecal occult blood test
- e) Complete blood count

3. What is the definitive treatment for this condition?

- a) Antibiotic therapy
- b) Bowel rest and IV fluids
- c) Surgery with resection of the aganglionic segment
- d) High-fiber diet
- e) Bowel stimulation with laxatives

Case 8

Chief complaint and history: A full-term newborn is brought to the hospital at 3 days of age with poor feeding, lethargy, and fever (38.2°C).

The baby was born via vaginal delivery to a mother with prolonged rupture of membranes (>18 hours). Vital signs: HR: 160 bpm, RR: 50 breaths/min, SpO₂: 97%. Neonatal examination: Poor tone, weak cry, delayed capillary refill, mild jaundice.

Questions:

1. What is the most likely diagnosis?

- a) Neonatal jaundice
- b) Neonatal sepsis
- c) Transient tachypnea of the newborn
- d) Neonatal meningitis
- e) Hypoglycemia

2. What is the best initial management?

- a) Supportive care and observation
- b) Broad-spectrum IV antibiotics
- c) Immediate phototherapy
- d) Lumbar puncture for CSF analysis
- e) Administration of IV glucose

3. What is the most common causative organism?

- a) Staphylococcus aureus
- b) Escherichia coli
- c) Group B Streptococcus
- d) Klebsiella pneumoniae
- e) Listeria monocytogenes

Case 9

Chief complaint and history: A 6-day-old newborn is brought to the emergency room due to excessive bleeding from the umbilical stump and bruising. The infant was born at home and did not receive routine newborn care. Vital signs: HR: 150 bpm, RR: 48 breaths/min, SpO₂: 98%. Neonatal examination: Pallor, bruising over the arms and legs, prolonged bleeding at the umbilical stump, and normal reflexes.

Questions:

1. What is the most likely diagnosis?

- a) Neonatal sepsis
- b) Hemophilia
- c) Vitamin K deficiency bleeding
- d) Neonatal leukemia
- e) Neonatal thrombocytopenia

2. What is the best immediate treatment?

- a) Intravenous antibiotics
- b) Fresh frozen plasma transfusion

- c) Intramuscular vitamin K
 - d) Immediate platelet transfusion
 - e) Corticosteroid therapy
- 3. How can this condition be prevented?**
- a) Early initiation of breastfeeding
 - b) Administration of oral iron supplements
 - c) Routine intramuscular vitamin K at birth
 - d) Delayed cord clamping
 - e) Prophylactic antibiotic eye drops

Case 10

Chief complaint and history: A 4-month-old infant is brought for a routine well-baby visit. The parents were unable to bring the baby for vaccinations earlier due to travel and ask if they can start rotavirus vaccination now. The baby is healthy, growing well, and has no history of hospitalizations.

Questions:

1. What is the upper age limit for the first dose of rotavirus vaccine?

- a) 6 weeks
- b) 12 weeks
- c) 16 weeks
- d) 24 weeks
- e) 32 weeks

2. If the infant has already missed the window for rotavirus vaccination, what should be done?

- a) Give the vaccine anyway
- b) Start with an alternative oral vaccine
- c) Skip rotavirus vaccination
- d) Delay the vaccine until the next visit
- e) Give a reduced dose

3. What is a contraindication for giving the rotavirus vaccine?

- a) Prematurity
- b) Low birth weight
- c) Mild fever
- d) History of intussusception
- e) History of mild diarrhea

TOPIC VI. VOMITING IN PREGNANCY. HYPEREMESIS GRAVIDARUM

Test questions:

- 1. Nausea and vomiting in pregnancy usually begin around:**
 - a) 2 weeks gestation
 - b) 4-6 weeks gestation
 - c) 8-10 weeks gestation
 - d) 12-14 weeks gestation
 - e) 16-18 weeks gestation
- 2. The peak severity of nausea and vomiting in pregnancy typically occurs at:**
 - a) 4 weeks
 - b) 6 weeks
 - c) 9 weeks
 - d) 12 weeks
 - e) 16 weeks
- 3. Which hormone is most associated with nausea and vomiting in pregnancy?**
 - a) Progesterone
 - b) Estrogen
 - c) Oxytocin
 - d) Human chorionic gonadotropin (hCG)
 - e) Prolactin
- 4. Which of the following factors is associated with an increased risk of nausea and vomiting in pregnancy?**
 - a) Multiparity
 - b) High pre-pregnancy BMI
 - c) Twin pregnancy
 - d) Smoking
 - e) Low hCG levels
- 5. Which condition is the severe form of nausea and vomiting in pregnancy?**
 - a) Gestational diabetes
 - b) Preeclampsia
 - c) Hyperemesis gravidarum
 - d) Placental abruption
 - e) Hydatidiform mole

6. Hyperemesis gravidarum is defined as:

- a) Vomiting in the first trimester
- b) Nausea with mild dehydration
- c) Severe vomiting leading to weight loss, dehydration, and electrolyte imbalances
- d) Reflux symptoms in pregnancy
- e) Self-limiting morning sickness

7. Which of the following is NOT a risk factor for hyperemesis gravidarum?

- a) High levels of hCG
- b) Twin or molar pregnancy
- c) History of migraines
- d) Smoking
- e) Female fetus

8. What is the most serious maternal complication of hyperemesis gravidarum?

- a) Placental insufficiency
- b) Wernicke's encephalopathy
- c) Preterm labor
- d) Fetal macrosomia
- e) Deep vein thrombosis

9. What is the most commonly observed electrolyte disturbance in hyperemesis gravidarum?

- a) Hypokalemia
- b) Hyperkalemia
- c) Hypocalcemia
- d) Hypermagnesemia
- e) Hyperglycemia

10. What is the primary cause of metabolic alkalosis in hyperemesis gravidarum?

- a) Excessive diarrhea
- b) Dehydration
- c) Persistent vomiting and loss of hydrochloric acid
- d) Increased renal bicarbonate loss
- e) Respiratory compensation

11. Which of the following laboratory abnormalities is characteristic of hyperemesis gravidarum?

- a) Increased TSH
- b) Metabolic acidosis

- c) Ketosis
- d) Hyperalbuminemia
- e) Increased hemoglobin A1C

12. The first-line treatment for nausea and vomiting in pregnancy is:

- a) Metoclopramide
- b) Ondansetron
- c) Pyridoxine (Vitamin B6)
- d) Dexamethasone
- e) IV fluids

13. When should hospitalization be considered for hyperemesis gravidarum?

- a) After two episodes of vomiting
- b) If nausea is unresponsive to home remedies
- c) If dehydration, weight loss, or electrolyte imbalances are present
- d) Only if symptoms persist after 16 weeks
- e) Only if fetal distress is detected

14. Which IV fluid is most appropriate for treating dehydration in hyperemesis gravidarum?

- a) Normal saline with dextrose
- b) Half-normal saline
- c) Lactated Ringer's solution
- d) 5% dextrose in water
- e) 3% hypertonic saline

15. Which medication is commonly used as a second-line treatment for hyperemesis gravidarum?

- a) Ondansetron
- b) Aspirin
- c) Labetalol
- d) Insulin
- e) Digoxin

16. Which vitamin deficiency is most concerning in hyperemesis gravidarum?

- a) Vitamin D
- b) Thiamine (Vitamin B1)
- c) Folic acid
- d) Vitamin C
- e) Vitamin K

17. Which antiemetic is a dopamine receptor antagonist commonly used in hyperemesis gravidarum?

- a) Ondansetron
- b) Promethazine
- c) Dexamethasone
- d) Ranitidine
- e) Magnesium sulfate

18. In severe hyperemesis gravidarum, total parenteral nutrition (TPN) is indicated when:

- a) Weight loss exceeds 5%
- b) Oral and enteral feeding are not tolerated
- c) The patient has mild nausea
- d) Symptoms last for less than 24 hours
- e) There is only mild dehydration

19. What is a common fetal complication associated with hyperemesis gravidarum?

- a) Fetal macrosomia
- b) Intrauterine growth restriction (IUGR)
- c) Increased risk of congenital malformations
- d) Polyhydramnios
- e) Fetal hyperglycemia

20. Hyperemesis gravidarum usually resolves by:

- a) 8 weeks gestation
- b) 12 weeks gestation
- c) 16-20 weeks gestation
- d) 24 weeks gestation
- e) 36 weeks gestation

21. Which of the following findings differentiates hyperemesis gravidarum from normal pregnancy-related nausea and vomiting?

- a) Vomiting occurs only in the morning
- b) No weight loss
- c) Persistent vomiting with ketonuria
- d) Symptoms resolve by 8 weeks gestation
- e) Vomiting is relieved by eating

22. Which metabolic abnormality is commonly seen in severe hyperemesis gravidarum?

- a) Respiratory acidosis
- b) Hypochloremic metabolic alkalosis
- c) Metabolic acidosis with increased anion gap

d) Hyperkalemia

e) Hypoglycemia

23. Which patient is at the highest risk for developing hyperemesis gravidarum?

a) A woman with a history of preeclampsia

b) A woman with a singleton pregnancy

c) A woman with a history of hyperemesis gravidarum in a previous pregnancy

d) A woman with a history of gestational diabetes

e) A woman with a previous cesarean delivery

24. Which of the following is an appropriate first-line treatment for nausea and vomiting in pregnancy?

a) Doxylamine and pyridoxine (Vitamin B6)

b) Ondansetron

c) Corticosteroids

d) Metoclopramide

e) Domperidone

25. What is the most severe neurological complication of untreated hyperemesis gravidarum?

a) Cerebral edema

b) Wernicke's encephalopathy

c) Optic neuritis

d) Multiple sclerosis

e) Epilepsy

26. What is the most appropriate dietary advice for women experiencing nausea and vomiting in pregnancy?

a) Consume large meals

b) Avoid protein-rich foods

c) Eat small, frequent meals and avoid strong odors

d) Drink large amounts of water before meals

e) Avoid eating in the morning

27. Which condition should be ruled out in a patient with severe hyperemesis gravidarum, high hCG levels, and an abnormally large uterus for gestational age?

a) Preeclampsia

b) Gestational trophoblastic disease (molar pregnancy)

c) Placenta previa

d) Ectopic pregnancy

e) Polyhydramnios

28. What is the mechanism of action of ondansetron, a second-line treatment for hyperemesis gravidarum?

- a) Dopamine receptor antagonist
- b) Serotonin (5-HT₃) receptor antagonist
- c) H₁ histamine receptor antagonist
- d) Anticholinergic agent
- e) GABA receptor agonist

29. A 12-week pregnant woman presents with persistent vomiting, dehydration, weight loss, and ketonuria. She has received IV fluids and first-line antiemetics without relief. What is the next step?

- a) Start corticosteroids
- b) Perform an upper gastrointestinal endoscopy
- c) Terminate pregnancy
- d) Observe for spontaneous improvement
- e) Discharge with oral rehydration

Situational tasks

Case 1

Chief complaint and history: A 25-year-old primigravida at 7 weeks of gestation presents with morning nausea and occasional vomiting for the past two weeks. She denies dehydration, weight loss, or abdominal pain. Vital signs: BP: 110/70 mmHg, pulse: 80 bpm, temperature: 36.8°C. Obstetric examination: Normal uterus size for gestational age, no tenderness, fetal heartbeat not yet detectable by Doppler.

Questions:

1. What is the most likely diagnosis?

- a) Gastroenteritis
- b) Preeclampsia
- c) Normal pregnancy-related nausea and vomiting
- d) Hyperemesis gravidarum
- e) Cholecystitis

2. What is the best initial management?

- a) Encourage small, frequent meals and vitamin B₆
- b) Hospital admission and IV fluids
- c) Start ondansetron immediately
- d) Perform an ultrasound to rule out molar pregnancy
- e) Prescribe corticosteroids

3. What is the typical duration of pregnancy-related nausea and vomiting?

- a) Until 8 weeks
- b) Until 12-14 weeks
- c) Throughout pregnancy
- d) Only during the second trimester
- e) Until delivery

Case 2

Chief complaint and history: A 28-year-old woman at 10 weeks of gestation presents with persistent vomiting, inability to tolerate food or fluids, and dizziness. She reports losing 5% of her pre-pregnancy weight. **Vital signs:** BP: 90/60 mmHg, pulse: 100 bpm, temperature: 37°C. **Obstetric examination:** Uterus size corresponds to gestational age, dry mucous membranes, tachycardia.

Questions:

1. What is the most likely diagnosis?

- a) Normal pregnancy nausea
- b) Hyperemesis gravidarum
- c) Gastroenteritis
- d) Food poisoning
- e) Acute appendicitis

2. What is the most appropriate initial management?

- a) IV fluids with dextrose and electrolytes
- b) Immediate enteral nutrition
- c) Start corticosteroids
- d) Send home with oral hydration therapy
- e) Perform emergency cesarean delivery

3. What laboratory abnormality is most likely?

- a) Hyperglycemia
- b) Hyperkalemia
- c) Ketosis
- d) Hypocalcemia
- e) Leukopenia

Case 3

Chief complaint and history: A 30-year-old woman at 9 weeks of gestation presents with refractory vomiting, severe fatigue, and muscle weakness. She was previously hospitalized for IV fluid therapy but

symptoms have persisted. Vital signs: BP: 88/58 mmHg, pulse: 110 bpm, temperature: 36.7°C. Obstetric examination: Uterus is soft, dry skin, and muscle cramps are noted.

Questions:

1. Which electrolyte abnormality is most likely responsible for her muscle weakness?

- a) Hypermagnesemia
- b) Hyperkalemia
- c) Hypokalemia
- d) Hypercalcemia
- e) Hypermagnesemia

2. Which medication should be given in addition to IV fluids?

- a) Potassium supplementation
- b) High-dose corticosteroids
- c) Insulin
- d) Magnesium sulfate
- e) Sodium bicarbonate

3. Which acid-base disorder is most likely in this patient?

- a) Metabolic acidosis
- b) Respiratory alkalosis
- c) Metabolic alkalosis
- d) Normal acid-base balance
- e) Respiratory acidosis

Case 4:

Chief complaint and history: A 29-year-old woman at 11 weeks of gestation presents with confusion, ataxia (unsteady gait), and persistent vomiting for 3 weeks. She reports significant weight loss and blurry vision. Vital signs: BP: 95/65 mmHg, pulse: 98 bpm, temperature: 37.2°C. Obstetric examination: Uterus corresponds to gestational age, nystagmus (involuntary eye movement), and mental status changes are present.

Questions:

1. What is the most likely diagnosis?

- a) Hyperemesis gravidarum with Wernicke's encephalopathy
- b) Preeclampsia
- c) Migraine with aura
- d) Stroke
- e) Severe dehydration

2. What is the best treatment?

- a) IV thiamine (Vitamin B1)
- b) High-dose corticosteroids
- c) Immediate cesarean section
- d) IV magnesium sulfate
- e) IV iron infusion

3. What is the primary cause of Wernicke's encephalopathy in hyperemesis gravidarum?

- a) Prolonged vomiting leading to thiamine deficiency
- b) Hypocalcemia
- c) Elevated progesterone
- d) Cerebral vasospasm
- e) Hypovolemia

Case 5

Chief complaint and history: A 32-year-old woman at 9 weeks gestation with a known twin pregnancy presents with severe nausea, vomiting, and dehydration. She has lost 6% of her body weight. Vital signs: BP: 90/60 mmHg, pulse: 102 bpm, temperature: 37°C. Obstetric examination: Uterus larger than expected for gestational age, fetal heartbeats detected separately.

Questions:

1. Why is this patient at higher risk for hyperemesis gravidarum?

- a) Increased levels of hCG
- b) Decreased progesterone
- c) Low maternal BMI
- d) Low estrogen levels
- e) History of cesarean section

2. What is the most appropriate initial management?

- a) IV fluids and antiemetics
- b) Immediate total parenteral nutrition (TPN)
- c) Discharge with oral antiemetics
- d) Induction of labor
- e) Observation without intervention

3. What is a potential fetal complication of severe hyperemesis gravidarum?

- a) Macrosomia
- b) Intrauterine growth restriction (IUGR)
- c) Polyhydramnios

- d) Neural tube defects
- e) Increased risk of congenital anomalies

Case 6

Chief complaint and history: A 27-year-old woman at 10 weeks gestation presents with severe nausea and vomiting, weight loss of 7% of her pre-pregnancy weight, and persistent headaches. She reports excessive fatigue and early-onset abdominal distension. Vital signs: BP: 140/90 mmHg, pulse: 100 bpm, temperature: 37°C. Obstetric examination: Uterus larger than expected for gestational age, no fetal heartbeat detected, bilateral ovarian enlargement.

Questions:

1. What is the most likely diagnosis?

- a) Normal pregnancy nausea
- b) Hyperemesis gravidarum with molar pregnancy
- c) Multiple gestation
- d) Preeclampsia
- e) Acute appendicitis

2. What is the most appropriate next step?

- a) Immediate dilation and curettage (D&C)
- b) Start antiemetics and IV fluids
- c) Observation and reassurance
- d) Administer methotrexate
- e) Perform immediate cesarean section

3. What diagnostic test would confirm the diagnosis?

- a) Serum hCG levels
- b) Fetal ultrasound
- c) Amniotic fluid analysis
- d) Doppler flow study
- e) Serum estradiol levels

Case 7

Chief complaint and history: A 31-year-old woman at 12 weeks gestation presents with persistent vomiting, severe dehydration, and oliguria (reduced urine output) for the past five days. Vital signs: BP: 90/55 mmHg, pulse: 105 bpm, temperature: 36.8°C. Obstetric examination: Dry mucous membranes, sunken eyes, and mild suprapubic tenderness.

Questions:

1. What is the most likely complication in this patient?

- a) Acute kidney injury (AKI) due to dehydration
- b) Preeclampsia
- c) Gestational diabetes
- d) Preterm labor
- e) Fetal distress

2. What is the most appropriate immediate management?

- a) IV fluid resuscitation with normal saline
- b) Oral hydration and discharge
- c) Start corticosteroids
- d) Administer insulin
- e) Induce labor

3. What laboratory findings would be expected in this patient?

- a) Increased serum creatinine and elevated blood urea nitrogen (BUN)
- b) Decreased hemoglobin levels
- c) Low serum sodium and chloride
- d) Increased platelet count
- e) High serum calcium

Case 8:

Chief complaint and history: A 34-year-old woman at 13 weeks gestation is admitted with severe vomiting, weight loss, and dehydration. She has been on prolonged bed rest due to severe nausea. Vital signs: BP: 118/78 mmHg, pulse: 98 bpm, temperature: 36.9°C. Obstetric examination: No fetal abnormalities detected, but swelling and tenderness in the right leg are present.

Questions:

1. What is the most likely complication?

- a) Deep vein thrombosis (DVT)
- b) Pulmonary embolism
- c) Gestational hypertension
- d) Preeclampsia
- e) Placental abruption

2. What is the best initial diagnostic test?

- a) Doppler ultrasound of the lower limb
- b) Serum D-dimer test
- c) CT pulmonary angiography
- d) X-ray of the leg

e) Amniotic fluid analysis

3. What is the best treatment for this patient?

a) Low molecular weight heparin (LMWH)

b) Warfarin

c) Aspirin

d) IV fluids only

e) Immediate cesarean delivery

Case 9:

Chief complaint and history: A 29-year-old woman at 11 weeks gestation presents with persistent vomiting, generalized weakness, and tingling sensation in the hands and feet. She reports not eating properly for the last four weeks. Vital signs: BP: 100/65 mmHg, pulse: 90 bpm, temperature: 36.7°C. Obstetric examination: Normal-sized uterus, muscle weakness, and loss of deep tendon reflexes in lower limbs.

Questions:

1. What is the most likely vitamin deficiency?

a) Vitamin B1 (Thiamine)

b) Vitamin B12

c) Vitamin C

d) Vitamin D

e) Folate

2. What is the appropriate treatment?

a) IV thiamine followed by dextrose infusion

b) High-dose folic acid supplements

c) Oral vitamin C tablets

d) Calcium supplementation

e) Increase dietary protein intake

3. What neurological condition is associated with this vitamin deficiency?

a) Wernicke's encephalopathy

b) Guillain-Barré syndrome

c) Multiple sclerosis

d) Myasthenia gravis

e) Bell's palsy

Case 10

Chief complaint and history: A 32-year-old woman at 20 weeks gestation has been struggling with persistent nausea and vomiting since the

first trimester. She reports poor weight gain and reduced fetal movements. Vital signs: BP: 115/75 mmHg, pulse: 95 bpm, temperature: 36.9°C. Obstetric examination: Fundal height measures smaller than expected for gestational age, and fetal heart rate is 125 bpm.

Questions:

1. What is the most likely fetal complication in this case?

- a) Fetal macrosomia
- b) Intrauterine growth restriction (IUGR)
- c) Polyhydramnios
- d) Neural tube defects
- e) Preterm labor

2. What is the best way to assess fetal growth?

- a) Serial ultrasound for estimated fetal weight
- b) Doppler flow study of uterine arteries
- c) Maternal serum alpha-fetoprotein levels
- d) Non-stress test (NST)
- e) Amniotic fluid index (AFI)

3. What is the most appropriate management?

- a) Optimize maternal nutrition and hydration
- b) Immediate induction of labor
- c) Administer corticosteroids for fetal lung maturity
- d) Perform amniocentesis
- e) Terminate pregnancy

TOPIC VII. HYPERTENSIVE DISORDERS IN PREGNANCY
GESTATIONAL HYPERTENSION
CHRONIC HYPERTENSION. PREECLAMPSIA.
ETIOPATHOGENESIS.
PATHOPHYSIOLOGY. CLINICAL TYPES. CLINICAL
FEATURES. COMPLICATIONS.
PROPHYLACTIC MEASURES. MANAGEMENT. ACUTE
FULMINANT
PREECLAMPSIA. ECLAMPSIA. CLINICAL FEATURES OF
ECLAMPSIA. \MANAGEMENT.

- 1. What is the diagnostic blood pressure (BP) threshold for hypertensive disorders in pregnancy?**
 - a) $\geq 120/80$ mmHg
 - b) $\geq 130/85$ mmHg
 - c) $\geq 140/90$ mmHg
 - d) $\geq 160/110$ mmHg
 - e) $\geq 180/120$ mmHg
- 2. Which of the following is true about chronic hypertension in pregnancy?**
 - a) It develops after 20 weeks of gestation
 - b) It resolves spontaneously after delivery
 - c) It is associated with an increased risk of preeclampsia
 - d) It does not require any treatment during pregnancy
 - e) It is always associated with proteinuria
- 3. Which of the following is a major risk factor for gestational hypertension?**
 - a) Low BMI
 - b) Smoking
 - c) Advanced maternal age
 - d) Multiparity
 - e) Chronic kidney disease
- 4. What is the main difference between gestational hypertension and preeclampsia?**
 - a) Presence of edema
 - b) Onset before 20 weeks
 - c) Presence of proteinuria or end-organ dysfunction
 - d) BP levels
 - e) Presence of seizures

5. Preeclampsia is diagnosed when a pregnant woman has hypertension and:

- a) Proteinuria or signs of organ dysfunction
- b) Edema in the lower extremities
- c) Headache and nausea
- d) Hypoglycemia
- e) Vaginal bleeding

6. Which organ system is most commonly affected in preeclampsia?

- a) Respiratory system
- b) Hepatic system
- c) Renal system
- d) Endocrine system
- e) Musculoskeletal system

7. Which of the following is a key pathophysiological feature of preeclampsia?

- a) Decreased vascular resistance
- b) Placental hypoperfusion and endothelial dysfunction
- c) Increased maternal cardiac output
- d) Increased renal perfusion
- e) Hyperglycemia

8. Which of the following is a severe feature of preeclampsia?

- a) BP 140/90 mmHg
- b) Proteinuria of 300 mg/24 hours
- c) Platelet count $<100,000/\text{mm}^3$
- d) Mild peripheral edema
- e) BP returning to normal postpartum

9. Eclampsia is characterized by:

- a) Sudden loss of vision
- b) Seizures in a woman with preeclampsia
- c) Severe proteinuria without hypertension
- d) Edema in the lower limbs
- e) Increased fetal movements

10. Which is the most serious fetal complication of preeclampsia?

- a) Preterm birth
- b) Fetal macrosomia
- c) Polyhydramnios
- d) Twin pregnancy
- e) Post-term pregnancy

11. HELLP syndrome includes all of the following EXCEPT:

- a) Hemolysis
- b) Elevated liver enzymes
- c) Low platelet count
- d) Hyperglycemia
- e) Hypertension

12. The most common cause of maternal death in eclampsia is:

- a) Stroke
- b) Postpartum hemorrhage
- c) Deep vein thrombosis
- d) Pulmonary edema
- e) Cardiac arrest

13. Which antihypertensive is contraindicated in pregnancy?

- a) Labetalol
- b) Methyldopa
- c) ACE inhibitors
- d) Nifedipine
- e) Hydralazine

14. Which drug is the first-line treatment for seizure prevention in eclampsia?

- a) Diazepam
- b) Phenytoin
- c) Magnesium sulfate
- d) Carbamazepine
- e) Midazolam

15. What is the definitive treatment for preeclampsia?

- a) Antihypertensive medication
- b) Magnesium sulfate
- c) Corticosteroids
- d) Delivery of the baby and placenta
- e) Diuretics

16. Which of the following is an indication for immediate delivery in preeclampsia?

- a) BP 140/90 mmHg
- b) Mild headache
- c) Severe fetal growth restriction
- d) Mild proteinuria
- e) Normal liver enzymes

17. Which of the following is a common prophylactic measure for preeclampsia?

- a) High-protein diet
- b) Low-dose aspirin in high-risk patients
- c) Calcium restriction
- d) Diuretics
- e) Daily heparin injections

18. At what gestational age is delivery recommended in a stable patient with preeclampsia without severe features?

- a) 30 weeks
- b) 32 weeks
- c) 34 weeks
- d) 37 weeks
- e) 40 weeks

19. What is the best initial treatment for severe hypertension ($\geq 160/110$ mmHg) in pregnancy?

- a) IV labetalol
- b) IV amlodipine
- c) Aspirin
- d) Magnesium sulfate
- e) Methotrexate

20. Which of the following factors contributes to the pathogenesis of preeclampsia?

- a) Increased placental blood flow
- b) Vasospasm and endothelial dysfunction
- c) Decreased inflammatory response
- d) Increased progesterone levels
- e) Decreased vascular resistance

21. Which of the following is a key feature of abnormal placentation in preeclampsia?

- a) Exaggerated trophoblast invasion into the myometrium
- b) Defective remodeling of spiral arteries
- c) Excessive fetal growth
- d) Increased maternal insulin resistance
- e) Overactivation of the parasympathetic nervous system

22. Which of the following biomarkers is elevated in preeclampsia?

- a) Placental growth factor (PlGF)
- b) Soluble fms-like tyrosine kinase 1 (sFlt-1)

- c) Estradiol
- d) Progesterone
- e) Beta-hCG

23. Which is the most significant risk factor for developing preeclampsia?

- a) First pregnancy (nulliparity)
- b) Low maternal age
- c) Previous vaginal delivery
- d) High caffeine intake
- e) Low sodium diet

24. Which symptom is an indicator of severe preeclampsia?

- a) Mild headache
- b) Right upper quadrant or epigastric pain
- c) Mild proteinuria
- d) Slightly elevated liver enzymes
- e) Decreased deep tendon reflexes

25. What level of proteinuria is diagnostic of preeclampsia?

- a) ≥ 150 mg/24 hours
- b) ≥ 300 mg/24 hours
- c) ≥ 500 mg/24 hours
- d) ≥ 1 g/24 hours
- e) ≥ 2 g/24 hours

26. Which test is used to confirm proteinuria when preeclampsia is suspected?

- a) Random urine protein-to-creatinine ratio
- b) Urinalysis dipstick alone
- c) 1-hour glucose tolerance test
- d) Serum creatinine
- e) Doppler ultrasound of the placenta

27. A pregnant woman at 36 weeks gestation presents with severe preeclampsia. What is the most appropriate next step?

- a) Start IV antihypertensive therapy and magnesium sulfate, then proceed with delivery
- b) Observe for spontaneous resolution
- c) Give corticosteroids and delay delivery until 39 weeks
- d) Start aspirin therapy
- e) Administer diuretics

28. Which of the following is the recommended first-line treatment for acute severe hypertension ($\geq 160/110$ mmHg) in pregnancy?

- a) IV Labetalol or Hydralazine
- b) ACE inhibitors
- c) Beta-blockers
- d) Furosemide
- e) Aspirin

29. Which medication is contraindicated for treating hypertension in pregnancy?

- a) Methyldopa
- b) Nifedipine
- c) Enalapril
- d) Labetalol
- e) Hydralazine

30. Which of the following is true about chronic hypertension in pregnancy?

- a) It develops after 20 weeks of gestation
- b) It resolves spontaneously after delivery
- c) It is associated with an increased risk of preeclampsia
- d) It does not require any treatment during pregnancy
- e) It is always associated with proteinuria

Situational tasks:

Case 1

Chief complaint and history: A 28-year-old woman at 34 weeks gestation presents with elevated blood pressure (BP) detected during a routine prenatal visit. She denies headaches, vision changes, or epigastric pain. She has no history of hypertension. Vital signs: BP: 145/92 mmHg, pulse: 85 bpm, temperature: 36.7°C. Obstetric examination: Fundal height corresponds to gestational age, fetal heart rate (FHR) is 140 bpm, no proteinuria.

Questions:

1. What is the most likely diagnosis?

- a) Chronic hypertension
- b) Gestational hypertension
- c) Mild preeclampsia
- d) Severe preeclampsia
- e) White coat hypertension

2. What is the most appropriate next step in management?

- a) Immediate induction of labor
- b) Antihypertensive treatment
- c) Close monitoring and weekly BP checks
- d) Start magnesium sulfate prophylaxis
- e) Perform emergency cesarean section

3. When should delivery be considered in this patient?

- a) At 34 weeks
- b) At 36 weeks
- c) At 37 weeks
- d) At 39 weeks
- e) At 41 weeks

Case 2

Chief complaint and history: A 35-year-old woman at 30 weeks gestation with a history of chronic hypertension presents with new onset headache and blurry vision. She has been taking labetalol for hypertension. Vital signs: BP: 160/105 mmHg, pulse: 88 bpm, temperature: 37.0°C. Obstetric examination: Fundal height slightly smaller than gestational age, FHR: 130 bpm, proteinuria is 2+ on dipstick.

Questions:

1. What is the most likely diagnosis?

- a) Chronic hypertension
- b) Gestational hypertension
- c) Superimposed preeclampsia
- d) Normal pregnancy changes
- e) Eclampsia

2. What is the next step in management?

- a) Continue current antihypertensive treatment
- b) Admit for close monitoring and magnesium sulfate prophylaxis
- c) Immediate induction of labor
- d) Start IV fluids and observe
- e) Perform an amniocentesis

3. What is the primary fetal complication associated with this condition?

- a) Fetal macrosomia
- b) Polyhydramnios
- c) Intrauterine growth restriction (IUGR)
- d) Neonatal hyperglycemia
- e) Twin pregnancy

Case 3

Chief complaint and history: A 29-year-old primigravida at 36 weeks gestation presents with persistent headache, nausea, and swelling in her hands and face. She also complains of epigastric pain and decreased fetal movements. Vital signs: BP: 170/110 mmHg, pulse: 95 bpm, temperature: 37.2°C. Obstetric examination: Uterus size corresponds to gestational age, FHR: 120 bpm, 3+ proteinuria on urine dipstick.

Questions:

1. What is the most likely diagnosis?

- a) Chronic hypertension
- b) Mild preeclampsia
- c) Severe preeclampsia
- d) HELLP syndrome
- e) Eclampsia

2. What is the best initial treatment?

- a) IV labetalol or hydralazine
- b) Continue observation until term
- c) Delay treatment until BP is >180/110 mmHg
- d) Start diuretics
- e) Discharge home with close monitoring

3. When should delivery be planned for this patient?

- a) Immediately
- b) At 37 weeks
- c) At 40 weeks
- d) At 34 weeks
- e) After corticosteroid administration

Case 4

Chief complaint and history: A 27-year-old woman at 32 weeks gestation is brought to the emergency department after experiencing a generalized tonic-clonic seizure lasting for one minute. She has a history of gestational hypertension but has been non-compliant with her medications. Vital signs: BP: 175/115 mmHg, pulse: 102 bpm, temperature: 37.4°C. Obstetric examination: Uterus firm, FHR: 140 bpm, 3+ proteinuria.

Questions:

1. What is the most likely diagnosis?

- a) Epilepsy
- b) Hypoglycemia-induced seizure

- c) Eclampsia
- d) Stroke
- e) Sepsis

2. What is the best first-line treatment?

- a) IV magnesium sulfate
- b) IV phenytoin
- c) Immediate cesarean section
- d) Insulin infusion
- e) CT scan of the brain

3. What is the definitive treatment for eclampsia?

- a) Long-term antihypertensives
- b) Delivery of the baby and placenta
- c) Weekly monitoring of BP
- d) IV steroids
- e) Emergency dialysis

Case 5

Chief complaint and history: A 30-year-old woman at 35 weeks gestation presents with severe right upper quadrant pain, nausea, and fatigue. She has a history of preeclampsia. Vital signs: BP: 160/100 mmHg, pulse: 90 bpm, temperature: 37.1°C. Lab findings: Platelet count: 85,000/mm³, AST: 180 IU/L, ALT: 170 IU/L, hemoglobin: low, LDH: elevated.

Questions:

1. What is the most likely diagnosis?

- a) Acute fatty liver of pregnancy
- b) HELLP syndrome
- c) Cholecystitis
- d) Acute pancreatitis
- e) Appendicitis

2. What is the best next step in management?

- a) Immediate delivery
- b) Start aspirin therapy
- c) Administer NSAIDs for pain
- d) Observe until 37 weeks
- e) Administer heparin

3. What is the most serious maternal complication of HELLP syndrome?

- a) Stroke

- b) Liver rupture
- c) Placental abruption
- d) Pulmonary edema
- e) Acute kidney injury

Case 6

Chief complaint and history: A 38-year-old woman at 28 weeks gestation presents for routine prenatal care. She has a history of chronic hypertension and has been on labetalol since early pregnancy. She denies headaches, visual changes, or swelling. Vital signs: BP: 158/98 mmHg, pulse: 85 bpm, temperature: 36.8°C. Obstetric examination: Fundal height corresponds to gestational age, FHR: 145 bpm, no proteinuria.

Questions:

1. What is the most appropriate management for this patient?

- a) Increase labetalol dose or switch to methyldopa
- b) Deliver immediately
- c) Discontinue antihypertensive therapy
- d) Start aspirin therapy
- e) Perform an emergency cesarean section

2. What fetal complication is this patient at higher risk for?

- a) Macrosomia
- b) Fetal growth restriction (IUGR)
- c) Polyhydramnios
- d) Post-term pregnancy
- e) Neural tube defects

3. At what gestational age should delivery be planned for well-controlled chronic hypertension?

- a) 34 weeks
- b) 36 weeks
- c) 37-39 weeks
- d) 40 weeks
- e) 42 weeks

Case 7

Chief complaint and history: A 31-year-old primigravida at 33 weeks gestation presents with severe headache, blurry vision, and shortness of breath. She has not been diagnosed with hypertension previously. Vital signs: BP: 165/110 mmHg, pulse: 95 bpm, temperature: 37.0°C. Obstetric

examination: Fundal height smaller than expected, FHR: 125 bpm with late decelerations, 3+ proteinuria on dipstick.

Questions:

1. What is the most likely diagnosis?

- a) Chronic hypertension
- b) Mild preeclampsia
- c) Preeclampsia with severe features
- d) Gestational hypertension
- e) HELLP syndrome

2. What is the most appropriate management?

- a) Admit for IV antihypertensives and magnesium sulfate, and deliver
- b) Observe and repeat BP measurements in one week
- c) Start aspirin therapy
- d) Perform emergency cesarean section
- e) Discharge with weekly monitoring

3. What is the most common fetal complication of this condition?

- a) Large for gestational age
- b) Fetal growth restriction (IUGR)
- c) Polyhydramnios
- d) Neonatal hypoglycemia
- e) Neonatal jaundice

Case 8

Chief complaint and history: A 27-year-old woman who delivered vaginally 2 days ago presents with a tonic-clonic seizure in the postpartum ward. She had gestational hypertension during pregnancy but was not on any medication. Vital signs: BP: 170/110 mmHg, pulse: 98 bpm, temperature: 37.2°C. Neurological examination: Post-ictal confusion, brisk deep tendon reflexes, and 3+ proteinuria.

Questions:

1. What is the most likely diagnosis?

- a) Hypoglycemia-induced seizure
- b) Stroke
- c) Postpartum eclampsia
- d) Epilepsy
- e) Sepsis-related encephalopathy

2. What is the best immediate treatment?

- a) IV magnesium sulfate
- b) IV diazepam

- c) IV phenytoin
- d) Oral antihypertensives only
- e) Perform CT brain

3. What is the next step after stabilizing the patient?

- a) Initiate IV antihypertensive therapy
- b) Immediate induction of labor
- c) Perform lumbar puncture
- d) Observe without treatment
- e) Discharge home after seizure stops

Case 9

Chief complaint and history: A 32-year-old woman at 35 weeks gestation presents with severe right upper quadrant pain, nausea, and malaise. She was diagnosed with preeclampsia two weeks ago. Vital signs: BP: 165/105 mmHg, pulse: 92 bpm, temperature: 37.3°C. Lab findings: Platelet count 80,000/mm³, AST 210 IU/L, ALT 180 IU/L, LDH elevated, hemolysis noted.

Questions:

1. What is the most likely diagnosis?

- a) Acute fatty liver of pregnancy
- b) HELLP syndrome
- c) Cholecystitis
- d) Acute pancreatitis
- e) Appendicitis

2. What is the best next step in management?

- a) Immediate delivery
- b) Start aspirin therapy
- c) Administer NSAIDs for pain
- d) Observe until 37 weeks
- e) Administer heparin

3. What is the most serious maternal complication of HELLP syndrome?

- a) Stroke
- b) Liver rupture
- c) Placental abruption
- d) Pulmonary edema
- e) Acute kidney injury

Case 10

Chief complaint and history: A 29-year-old woman at 36 weeks gestation presents with sudden onset headache, blurry vision, and swelling in her hands and face. She was diagnosed with gestational hypertension at 32 weeks but was managed conservatively. Vital signs: BP: 170/115 mmHg, pulse: 96 bpm, temperature: 36.9°C. Obstetric examination: Fundal height appropriate, FHR: 135 bpm, 2+ proteinuria.

Questions:

1. What is the most likely diagnosis?

- a) Gestational hypertension
- b) Mild preeclampsia
- c) Severe preeclampsia
- d) Chronic hypertension
- e) Eclampsia

2. What is the next step in management?

- a) Administer IV antihypertensives and magnesium sulfate
- b) Continue conservative monitoring
- c) Schedule delivery at 39 weeks
- d) Perform emergency cesarean section
- e) Administer diuretics

3. What is the definitive treatment for this patient?

- a) Antihypertensive therapy
- b) Magnesium sulfate maintenance
- c) Immediate delivery
- d) Long-term aspirin therapy
- e) Dialysis

**TOPIC VIII. HEMORRHAGE IN EARLY PREGNANCY
SPONTANEOUS ABORTION (MISCARRIAGE). THREATENED
MISCARRIAGE. INEVITABLE. COMPLETE. INCOMPLETE.
MISSED. SEPTIC ABORTION. RECURRENT. CERVICAL
INCOMPETENCE.**

Test questions:

- 1. What is the most common cause of spontaneous abortion in the first trimester?**
 - a) Maternal infections
 - b) Chromosomal abnormalities
 - c) Uterine anomalies
 - d) Maternal smoking
 - e) Hormonal imbalances
- 2. Which of the following is the hallmark of a threatened miscarriage?**
 - a) Open cervix with bleeding
 - b) Closed cervix with vaginal bleeding
 - c) Foul-smelling discharge
 - d) Presence of fetal tissue in the vaginal canal
 - e) No fetal heartbeat on ultrasound
- 3. In an inevitable miscarriage, which finding is present?**
 - a) Cervical dilation with vaginal bleeding
 - b) Closed cervix with normal fetal heartbeat
 - c) Complete passage of fetal tissue
 - d) No fetal pole on ultrasound
 - e) Uterine rupture
- 4. Which type of miscarriage is characterized by retained fetal tissue inside the uterus without any symptoms?**
 - a) Threatened miscarriage
 - b) Complete miscarriage
 - c) Missed miscarriage
 - d) Inevitable miscarriage
 - e) Septic miscarriage
- 5. Which of the following is a major risk factor for recurrent miscarriage?**
 - a) Smoking
 - b) Uterine anomalies

- c) First pregnancy
- d) Advanced paternal age
- e) Multiparity

6. Which clinical feature differentiates an incomplete miscarriage from a complete miscarriage?

- a) Absence of vaginal bleeding
- b) No retained tissue in the uterus
- c) Presence of retained products of conception
- d) Closed cervix
- e) Presence of fetal heartbeat

7. Septic abortion is most commonly associated with:

- a) Chromosomal abnormalities
- b) Induced abortion with retained infected tissue
- c) Multiple gestation
- d) Maternal diabetes
- e) Cervical incompetence

8. Cervical incompetence is best diagnosed by:

- a) Clinical symptoms alone
- b) Cervical length measurement via transvaginal ultrasound
- c) Fetal heart rate monitoring
- d) Hysteroscopy
- e) MRI

9. Which procedure is commonly used to manage cervical incompetence?

- a) Dilation and curettage
- b) Cervical cerclage
- c) Hysterectomy
- d) Ovarian cystectomy
- e) Uterine artery embolization

10. At what gestational age is cervical cerclage typically placed?

- a) 6-8 weeks
- b) 10-12 weeks
- c) 12-14 weeks
- d) 20-24 weeks
- e) 30-32 weeks

11. The most common site of ectopic pregnancy is:

- a) Ovary
- b) Cervix
- c) Ampullary portion of the fallopian tube

- d) Abdominal cavity
- e) Cornual region of the uterus

12. Which of the following is a key risk factor for ectopic pregnancy?

- a) Young maternal age
- b) Smoking
- c) Previous pelvic inflammatory disease (PID)
- d) Twin pregnancy
- e) Polyhydramnios

13. Which symptom is most suggestive of a ruptured ectopic pregnancy?

- a) Mild cramping with spotting
- b) Severe unilateral abdominal pain with hypotension
- c) No symptoms but abnormal ultrasound
- d) High fever
- e) Painless vaginal bleeding

14. What is the best initial diagnostic test for suspected ectopic pregnancy?

- a) Pelvic MRI
- b) Serum beta-hCG and transvaginal ultrasound
- c) Abdominal X-ray
- d) CT scan
- e) Endometrial biopsy

15. Medical management of an unruptured ectopic pregnancy is with:

- a) Methotrexate
- b) Misoprostol
- c) Oxytocin
- d) Heparin
- e) Labetalol

16. The hallmark ultrasound finding in a complete hydatidiform mole is:

- a) Single viable fetus
- b) Snowstorm appearance
- c) Ovarian cysts
- d) Polyhydramnios
- e) Placental abruption

17. Which of the following is characteristic of a complete molar pregnancy?

- a) Presence of fetal parts
- b) Triploid karyotype
- c) High beta-hCG levels with no fetal tissue
- d) Normal fetal development
- e) Normal placenta

18. Which GTD has the highest risk of malignancy?

- a) Complete hydatidiform mole
- b) Partial hydatidiform mole
- c) Choriocarcinoma
- d) Placental site trophoblastic tumor
- e) Invasive mole

19. Which of the following is the treatment of choice for a molar pregnancy?

- a) Induction of labor
- b) Hysterectomy
- c) Suction curettage
- d) Chemotherapy
- e) Methotrexate

20. What is the primary follow-up for molar pregnancy?

- a) Weekly beta-hCG monitoring
- b) MRI of the pelvis
- c) Repeat endometrial biopsy
- d) Monthly pelvic ultrasound
- e) Immediate chemotherapy

21. Which of the following best describes a complete miscarriage?

- a) Retained fetal tissue with an open cervix
- b) Retained fetal tissue with a closed cervix
- c) Expulsion of all fetal and placental tissue with a closed cervix
- d) Fetal heartbeat is present but cervix is dilated
- e) No vaginal bleeding but fetal demise on ultrasound

22. Which of the following is NOT a common cause of recurrent miscarriage?

- a) Antiphospholipid syndrome
- b) Chromosomal abnormalities
- c) Uterine anomalies
- d) High caffeine intake
- e) Thyroid dysfunction

23. In a patient with a missed miscarriage, what is the preferred management if the patient is stable?

- a) Expectant management
- b) Emergency dilation and curettage (D&C)
- c) Immediate hysterectomy
- d) Induction of labor with oxytocin
- e) Long-term anticoagulation

24. Which of the following best describes the clinical presentation of a septic abortion?

- a) Vaginal bleeding with an open cervix but no infection
- b) Fever, abdominal tenderness, and foul-smelling vaginal discharge
- c) Painless vaginal bleeding with closed cervix
- d) Hypotension and severe nausea
- e) Sudden loss of fetal movements

25. Which of the following beta-hCG patterns is most consistent with an ectopic pregnancy?

- a) Rapid doubling every 48 hours
- b) Slow rise or plateauing of beta-hCG
- c) Sudden decrease in beta-hCG
- d) High beta-hCG with a viable intrauterine pregnancy
- e) High beta-hCG with fetal heart tones on ultrasound

26. What is the most appropriate treatment for a ruptured ectopic pregnancy?

- a) Expectant management
- b) Methotrexate therapy
- c) Emergency laparotomy or laparoscopy
- d) Hysterectomy
- e) Dilation and curettage

27. What is the most appropriate management for a stable patient with an unruptured ectopic pregnancy and beta-hCG <5,000 mIU/mL?

- a) Expectant management only
- b) Methotrexate therapy
- c) Emergency laparotomy
- d) Immediate induction of labor
- e) Administration of progesterone

28. Which of the following increases the risk of developing gestational trophoblastic disease?

- a) Maternal age <20 or >40 years
- b) Smoking during pregnancy
- c) Previous cesarean section

- d) Low maternal BMI
- e) History of polycystic ovary syndrome

29. Which of the following findings is most specific for a partial hydatidiform mole?

- a) Presence of a normal fetus with a normal placenta
- b) Diploid karyotype (46,XX)
- c) Triploid karyotype (69,XXX or 69,XXY)
- d) No fetal tissue detected
- e) Extremely high beta-hCG with malignant transformation

30. What is the most serious complication of gestational trophoblastic disease?

- a) Secondary infertility
- b) Choriocarcinoma with distant metastasis
- c) Recurrent spontaneous abortion
- d) Ectopic pregnancy
- e) Postpartum hemorrhage

Situational tasks:

Case 1

Chief complaint and history: A 26-year-old woman at 8 weeks gestation presents with mild vaginal bleeding and lower abdominal cramping. She denies passing any clots or tissue. Vital signs: BP: 110/70 mmHg, pulse: 80 bpm, temperature: 36.8°C. Obstetric examination: Cervix is closed, uterus is of appropriate size for gestational age, and transvaginal ultrasound shows a live fetus with a heart rate of 160 bpm.

Questions:

1. What is the most likely diagnosis?

- a) Inevitable miscarriage
- b) Threatened miscarriage
- c) Missed miscarriage
- d) Complete miscarriage
- e) Ectopic pregnancy

2. What is the most appropriate management?

- a) Immediate dilation and curettage
- b) Hospitalization with IV fluids
- c) Reassurance, bed rest, and repeat ultrasound in one week
- d) Start methotrexate therapy
- e) Perform an emergency cesarean section

3. What is the most common outcome of a threatened miscarriage?

- a) Inevitable progression to pregnancy loss
- b) Complete resolution with continuation of pregnancy
- c) Immediate need for surgical intervention
- d) Development of gestational trophoblastic disease
- e) Uterine rupture

Case 2

Chief complaint and history: A 29-year-old woman at 10 weeks gestation presents with heavy vaginal bleeding and severe lower abdominal pain for the past 6 hours. She reports passing large clots. Vital signs: BP: 100/60 mmHg, pulse: 95 bpm, temperature: 37°C. Obstetric examination: Cervix is open, ultrasound shows a non-viable fetus with retained products of conception.

Questions:

1. What is the most likely diagnosis?

- a) Complete miscarriage
- b) Threatened miscarriage
- c) Inevitable miscarriage
- d) Ectopic pregnancy
- e) Septic miscarriage

2. What is the best next step in management?

- a) Expectant management and close follow-up
- b) Suction curettage or medical management with misoprostol
- c) Immediate hysterectomy
- d) Start chemotherapy
- e) Perform an amniocentesis

3. What is the risk if the retained products are not expelled?

- a) Development of gestational trophoblastic neoplasia
- b) Risk of infection and sepsis
- c) Spontaneous fetal survival
- d) Development of cervical cancer
- e) Increased risk of macrosomia

Case 3

Chief complaint and history: A 24-year-old woman at 9 weeks gestation presents with a history of vaginal bleeding and cramping that has now stopped. She passed a large clot at home. Vital signs: BP: 120/75

mmHg, pulse: 78 bpm, temperature: 36.9°C. Obstetric examination: Cervix is closed, uterus is smaller than gestational age, and ultrasound shows an empty uterus with no retained products of conception.

Questions:

1. What is the most likely diagnosis?

- a) Incomplete miscarriage
- b) Complete miscarriage
- c) Missed miscarriage
- d) Threatened miscarriage
- e) Ectopic pregnancy

2. What is the best management for this patient?

- a) Expectant management with follow-up
- b) Immediate dilation and curettage
- c) Induction of labor
- d) Start high-dose progesterone
- e) Perform MRI of the pelvis

3. What advice should be given to the patient regarding future pregnancies?

- a) Delay conception for 1 year
- b) Use contraception for 3 months before trying to conceive
- c) Pregnancy can be attempted immediately if desired
- d) Require preconception chemotherapy
- e) Undergo hysteroscopic evaluation

Case 4

Chief complaint and history: A 32-year-old woman with a history of infertility presents with sudden severe lower abdominal pain, dizziness, and vaginal spotting. She had a positive pregnancy test but has not had an ultrasound yet. Vital signs: BP: 90/60 mmHg, pulse: 110 bpm, temperature: 37.1°C. Obstetric examination: Abdomen is tender with rebound tenderness, ultrasound shows no intrauterine pregnancy but free fluid in the pelvis.

Questions:

1. What is the most likely diagnosis?

- a) Incomplete miscarriage
- b) Ruptured ectopic pregnancy
- c) Molar pregnancy
- d) Missed miscarriage
- e) Threatened miscarriage

2. What is the next step in management?

- a) Methotrexate therapy
- b) Immediate laparotomy or laparoscopy
- c) Expectant management
- d) High-dose progesterone therapy
- e) Repeat ultrasound in one week

3. What is the most common site of ectopic pregnancy?

- a) Ovary
- b) Cervix
- c) Ampullary portion of the fallopian tube
- d) Abdominal cavity
- e) Cornual region of the uterus

Case 5

Chief complaint and history: A 35-year-old woman at 12 weeks gestation presents with severe nausea, vomiting, and painless vaginal bleeding. She has had rapid uterine growth. Vital signs: BP: 150/100 mmHg, pulse: 85 bpm, temperature: 37.0°C. Obstetric examination: Uterus is larger than gestational age, ultrasound shows a "snowstorm" pattern with no fetal parts.

Questions:

1. What is the most likely diagnosis?

- a) Partial hydatidiform mole
- b) Complete hydatidiform mole
- c) Twin pregnancy
- d) Threatened miscarriage
- e) Ectopic pregnancy

2. What is the most appropriate next step in management?

- a) Suction curettage
- b) Induction of labor
- c) Immediate chemotherapy
- d) Expectant management
- e) Repeat ultrasound in two weeks

3. What is the most serious complication of this condition?

- a) Choriocarcinoma
- b) Preterm labor
- c) Severe anemia
- d) Placental abruption
- e) Fetal macrosomia

Case 6

Chief complaint and history: A 30-year-old woman at 11 weeks gestation presents with heavy vaginal bleeding and severe lower abdominal pain. She reports passing some tissue but continues to have intermittent cramping and bleeding. Vital signs: BP: 105/70 mmHg, pulse: 90 bpm, temperature: 36.9°C. Obstetric examination: Cervix is open, uterus is slightly tender, ultrasound shows retained products of conception in the uterus.

Questions:

1. What is the most likely diagnosis?

- a) Threatened miscarriage
- b) Inevitable miscarriage
- c) Incomplete miscarriage
- d) Complete miscarriage
- e) Molar pregnancy

2. What is the best next step in management?

- a) Expectant management and close monitoring
- b) Suction curettage or medical management with misoprostol
- c) Emergency hysterectomy
- d) Induction of labor
- e) Long-term progesterone therapy

3. What is the risk if the retained products are not removed?

- a) Choriocarcinoma development
- b) Uterine rupture
- c) Infection and sepsis
- d) Spontaneous fetal survival
- e) Fetal macrosomia

Case 7

Chief complaint and history: A 27-year-old woman at 9 weeks gestation presents with fever, chills, and foul-smelling vaginal discharge after a history of vaginal bleeding for three days. She underwent an unsafe abortion at home. Vital signs: BP: 100/60 mmHg, pulse: 110 bpm, temperature: 38.9°C. Obstetric examination: Tender uterus with cervical motion tenderness, foul-smelling discharge, and ultrasound showing retained products of conception.

Questions:

1. What is the most likely diagnosis?

- a) Threatened miscarriage

- b) Septic abortion
- c) Ectopic pregnancy
- d) Missed miscarriage
- e) Complete miscarriage

2. What is the most appropriate next step in management?

- a) Expectant management
- b) Immediate IV antibiotics and surgical evacuation
- c) Induction of labor
- d) Administer methotrexate
- e) Perform an emergency cesarean section

3. What is the most serious complication of a septic abortion?

- a) Uterine perforation
- b) Pelvic inflammatory disease
- c) Septic shock and multi-organ failure
- d) Preterm labor
- e) Cervical incompetence

Case 8

Chief complaint and history: A 32-year-old woman at 18 weeks gestation presents with painless vaginal pressure and spotting. She has had two previous second-trimester pregnancy losses. Vital signs: BP: 120/80 mmHg, pulse: 85 bpm, temperature: 36.8°C. Obstetric examination: Cervix is dilated to 3 cm, no contractions, and ultrasound shows a short cervix (less than 25 mm) with bulging membranes.

Questions:

1. What is the most likely diagnosis?

- a) Preterm labor
- b) Cervical incompetence
- c) Placenta previa
- d) Threatened miscarriage
- e) Missed miscarriage

2. What is the best treatment option?

- a) Expectant management
- b) Cervical cerclage placement
- c) Immediate induction of labor
- d) Bed rest and tocolytics
- e) Administration of magnesium sulfate

3. What is the best prophylactic approach for future pregnancies?

- a) Early administration of methotrexate

- b) Preconception progesterone therapy
- c) Placement of cervical cerclage at 12–14 weeks gestation
- d) Scheduled cesarean delivery at 37 weeks
- e) Daily aspirin therapy

Case 9

Chief complaint and history: A 28-year-old woman presents with sharp, right lower quadrant pain and vaginal spotting. She has a history of infertility and previous pelvic inflammatory disease (PID). Vital signs: BP: 120/75 mmHg, pulse: 85 bpm, temperature: 37°C. Obstetric examination: Right adnexal tenderness, positive beta-hCG, and ultrasound shows no intrauterine pregnancy, but a gestational sac in the right fallopian tube.

Questions:

1. What is the most likely diagnosis?

- a) Threatened miscarriage
- b) Incomplete miscarriage
- c) Tubal ectopic pregnancy
- d) Molar pregnancy
- e) Missed miscarriage

2. What is the best management option if the patient is stable?

- a) Immediate laparotomy
- b) Methotrexate therapy
- c) Induction of labor
- d) Hysterectomy
- e) Expectant management

3. What is a contraindication to methotrexate therapy?

- a) Beta-hCG level <1,500 mIU/mL
- b) Hemodynamically stable patient
- c) Ruptured ectopic pregnancy
- d) No fetal heartbeat
- e) Ectopic mass size <3 cm

Situational Issue № 10

Chief complaint and history: A 34-year-old woman at 14 weeks gestation presents with persistent nausea, abnormal vaginal bleeding, and larger-than-expected uterus for gestational age. Vital signs: BP: 145/90 mmHg, pulse: 88 bpm, temperature: 37.2°C. Obstetric examination: Uterus is larger than expected for gestational age, ultrasound shows fetal parts with multiple cystic spaces.

Questions:

1. What is the most likely diagnosis?

- a) Complete hydatidiform mole
- b) Partial hydatidiform mole
- c) Twin pregnancy
- d) Placenta previa
- e) Missed miscarriage

2. What is the best initial management?

- a) Expectant management
- b) Suction curettage
- c) Methotrexate
- d) Immediate chemotherapy
- e) Induction of labor

3. What follow-up is required after treatment?

- a) Weekly beta-hCG monitoring until undetectable
- b) Repeat ultrasound every two weeks
- c) Immediate hysterectomy
- d) Hormonal therapy
- e) MRI of the pelvis

**TOPIC IX ANTEPARTUM HEMORRHAGE PLACENTA PREVIA.
CLINICAL FEATURES. DIFFERENTIAL DIAGNOSIS.
COMPLICATIONS. MANAGEMENT. PLACENTA PREVIA.
APPROACH FOR PLACENTA PREVIA ACCRETA. ABRUPTIO
PLACENTAE. CLINICAL FEATURES. COMPLICATIONS.
TREATMENT.**

Test questions:

1. Antepartum hemorrhage (APH) is defined as bleeding from the genital tract after:

- a) 12 weeks of gestation
- b) 16 weeks of gestation
- c) 20 weeks of gestation
- d) 24 weeks of gestation
- e) 28 weeks of gestation

2. Which of the following is the most common cause of antepartum hemorrhage?

- a) Placenta previa
- b) Uterine rupture
- c) Cervical incompetence
- d) Abruptio placentae
- e) Vasa previa

3. Which of the following is the classic presentation of placenta previa?

- a) Sudden, painless vaginal bleeding in the second or third trimester
- b) Painful contractions with vaginal bleeding
- c) Severe abdominal pain with fetal distress
- d) Hypotension and loss of fetal movement
- e) Uterine tenderness with fever

4. What is the most appropriate diagnostic test for placenta previa?

- a) Digital vaginal examination
- b) Transabdominal ultrasound
- c) Transvaginal ultrasound
- d) MRI
- e) Hysteroscopy

5. Which of the following should be avoided in a patient with suspected placenta previa?

- a) Transabdominal ultrasound
- b) Digital vaginal examination
- c) Blood transfusion
- d) Cesarean delivery
- e) Monitoring fetal heart rate

6. Which of the following is NOT a risk factor for placenta previa?

- a) Previous cesarean section
- b) Multiparity
- c) Smoking
- d) Advanced maternal age
- e) Polyhydramnios

7. Which of the following is a complication of placenta previa?

- a) Postpartum hemorrhage
- b) Oligohydramnios
- c) Chorioamnionitis
- d) Uterine rupture
- e) Fetal macrosomia

8. At what gestational age should delivery be planned for a stable placenta previa patient?

- a) 32 weeks
- b) 34 weeks
- c) 36 weeks
- d) 37 weeks
- e) 39 weeks

9. Which mode of delivery is recommended for complete placenta previa?

- a) Vaginal delivery
- b) Induction of labor
- c) Elective cesarean section
- d) Forceps-assisted delivery
- e) Expectant management until labor begins

10. Which of the following conditions is most commonly associated with placenta previa?

- a) Placenta accreta
- b) Preeclampsia
- c) Chorioamnionitis
- d) Preterm labor

e) Cord prolapse

11. Placenta accreta is best diagnosed by:

a) Transvaginal ultrasound

b) Doppler ultrasound

c) MRI

d) Hysteroscopy

e) Amniocentesis

12. Which of the following is a major risk factor for placenta accreta?

a) Previous cesarean delivery

b) Nulliparity

c) First-trimester bleeding

d) Maternal obesity

e) Hyperthyroidism

13. What is the preferred management for placenta accreta?

a) Expectant management

b) Induction of labor at term

c) Cesarean hysterectomy

d) Uterine artery embolization

e) Methotrexate therapy

14. Placenta percreta is characterized by:

a) Invasion of the placenta into the myometrium

b) Penetration of the placenta through the entire uterine wall

c) Retention of the placenta beyond 30 minutes after delivery

d) Placental separation before delivery

e) Placental abruption with hemorrhage

15. What is the most feared complication of placenta accreta?

a) Intrauterine growth restriction

b) Postpartum hemorrhage

c) Oligohydramnios

d) Neonatal hypoglycemia

e) Chorioamnionitis

16. Which of the following best describes abruptio placentae?

a) Painless vaginal bleeding

b) Painful vaginal bleeding with uterine tenderness

c) Sudden rupture of membranes without bleeding

d) Hypertension with proteinuria

e) Decreased fetal movement with normal placenta

17. Which of the following is a major risk factor for placental abruption?

- a) Smoking
- b) History of previous cesarean section
- c) Nulliparity
- d) High BMI
- e) Gestational diabetes

18. What is the most serious fetal complication of abruptio placentae?

- a) Preterm birth
- b) Fetal hypoxia and death
- c) Fetal macrosomia
- d) Polyhydramnios
- e) Neonatal jaundice

19. What is the best management for severe placental abruption with fetal distress?

- a) Immediate cesarean delivery
- b) Expectant management
- c) Tocolysis and steroid administration
- d) Induction of labor at term
- e) Transfusion without delivery

20. Which lab finding is most commonly associated with severe placental abruption?

- a) Thrombocytopenia and hypofibrinogenemia
- b) Hyperglycemia
- c) Elevated amniotic fluid index
- d) Increased hemoglobin levels
- e) Increased TSH levels

21. Which of the following is the best initial step in managing a stable patient with confirmed placenta previa at 30 weeks gestation?

- a) Immediate cesarean section
- b) Expectant management with pelvic rest and serial ultrasounds
- c) Induction of labor
- d) Uterine artery embolization
- e) Hysterectomy

22. A 32-year-old woman at 36 weeks gestation with a history of placenta previa presents with painless vaginal bleeding. What is the most appropriate next step?

- a) Immediate cesarean delivery
- b) Vaginal examination
- c) Administration of tocolytics
- d) Induction of labor
- e) Expectant management until 39 weeks

23. What is the most significant maternal complication of placenta previa?

- a) Preterm labor
- b) Placenta accreta
- c) Fetal macrosomia
- d) Oligohydramnios
- e) Gestational hypertension

24. Which of the following should be avoided in the management of placenta previa?

- a) Serial transvaginal ultrasounds
- b) Blood transfusion if needed
- c) Digital vaginal examination
- d) Cesarean delivery
- e) Corticosteroids if preterm

25. Which condition is most strongly associated with placenta accreta?

- a) Previous cesarean delivery
- b) Gestational hypertension
- c) Twin pregnancy
- d) Preterm labor
- e) Polycystic ovarian syndrome

26. Which imaging technique is most useful for diagnosing placenta accreta?

- a) MRI
- b) Transvaginal ultrasound with Doppler
- c) Hysteroscopy
- d) Amniocentesis
- e) Fetal echocardiography

27. What is the best approach to delivery in a patient with placenta accreta diagnosed antenatally?

- a) Trial of vaginal delivery
- b) Induction of labor at term
- c) Scheduled cesarean hysterectomy at 34–36 weeks
- d) Expectant management until 40 weeks

e) Immediate uterine artery embolization

28. Which of the following is NOT a risk factor for abruptio placentae?

- a) Hypertension
- b) Cocaine use
- c) Trauma
- d) Polyhydramnios
- e) Hyperthyroidism

29. A 30-year-old woman at 34 weeks gestation presents with vaginal bleeding, severe abdominal pain, and a firm, tender uterus. Fetal heart rate monitoring shows late decelerations. What is the best next step?

- a) Immediate cesarean delivery
- b) Expectant management
- c) Amnioinfusion
- d) Administration of tocolytics
- e) Induction of labor

30. Which of the following is a potential complication of abruptio placentae?

- a) Amniotic fluid embolism
- b) Sheehan's syndrome
- c) Disseminated intravascular coagulation (DIC)
- d) Fetal macrosomia
- e) Polyhydramnios

Situational tasks:

Case 1

Chief complaint and history: A 28-year-old woman at 30 weeks gestation presents with painless vaginal bleeding for the past two hours. There is no history of trauma, contractions, or rupture of membranes. She has had two prior cesarean sections. Vital signs: BP: 120/80 mmHg, pulse: 85 bpm, temperature: 36.8°C. Obstetric examination: Fundal height corresponds to gestational age, fetal heart rate (FHR) is 140 bpm, and ultrasound confirms a complete placenta previa.

Questions:

1. What is the most likely diagnosis?

- a) Placental abruption
- b) Placenta previa
- c) Vasa previa

d) Uterine rupture

2. What is the next step in management?

a) Digital vaginal examination

b) Expectant management with pelvic rest and serial ultrasounds

c) Immediate cesarean delivery

d) Induction of labor

e) Administer IV oxytocin

3. At what gestational age should delivery be planned for this patient?

a) 32 weeks

b) 34 weeks

c) 36 weeks

d) 37 weeks

e) 40 weeks

Case 2

Chief complaint and history: A 32-year-old woman at 36 weeks gestation presents with heavy painless vaginal bleeding. She has a history of placenta previa diagnosed at 28 weeks. Vital signs: BP: 110/70 mmHg, pulse: 95 bpm, temperature: 37°C. Obstetric examination: Fundal height appropriate for gestation, FHR: 135 bpm, and continued vaginal bleeding.

Questions:

1. What is the most appropriate next step?

a) Immediate cesarean delivery

b) Expectant management

c) Attempt vaginal delivery

d) Perform digital vaginal examination

e) Administer high-dose oxytocin

2. What is the most serious maternal complication of placenta previa?

a) Postpartum hemorrhage

b) Uterine rupture

c) Preeclampsia

d) Gestational diabetes

e) Cord prolapse

Case 3

Chief complaint and history: A 35-year-old woman at 34 weeks gestation presents for a routine ultrasound. She has had three previous

cesarean deliveries. The ultrasound shows a placenta covering the cervix with increased vascularity extending into the myometrium, raising suspicion for placenta accreta. Vital signs: BP: 125/80 mmHg, pulse: 88 bpm, temperature: 36.7°C.

Questions:

1. What is the most appropriate next step in management?

- a) Plan for scheduled cesarean hysterectomy at 34–36 weeks
- b) Induce labor at 37 weeks
- c) Perform uterine artery embolization now
- d) Offer vaginal delivery
- e) Perform dilation and curettage

2. What is the most common maternal complication of placenta accreta?

- a) Postpartum hemorrhage
- b) Chorioamnionitis
- c) Neonatal macrosomia
- d) Preeclampsia
- e) Gestational diabetes

Case 4

Chief complaint and history: A 29-year-old woman at 33 weeks gestation presents with sudden severe lower abdominal pain and vaginal bleeding. She has a history of hypertension. Vital signs: BP: 160/100 mmHg, pulse: 105 bpm, temperature: 37.2°C. Obstetric examination: Firm, tender uterus with vaginal bleeding. FHR: 100 bpm with late decelerations.

Questions:

1. What is the most likely diagnosis?

- a) Placenta previa
- b) Abruptio placentae
- c) Uterine rupture
- d) Cervical incompetence
- e) Preterm labor

2. What is the most appropriate next step in management?

- a) Immediate cesarean delivery
- b) Expectant management
- c) Vaginal delivery
- d) Administer tocolytics
- e) Induction of labor

Case 5

Chief complaint and history: A 27-year-old woman at 32 weeks gestation presents with sudden severe abdominal pain and a firm, tender uterus but no visible vaginal bleeding. She has a history of cocaine use and hypertension. Vital signs: BP: 150/95 mmHg, pulse: 102 bpm, temperature: 37°C. Obstetric examination: Uterus is rigid and painful, FHR is 90 bpm.

Questions:

1. What is the most likely diagnosis?

- a) Uterine rupture
- b) Concealed placental abruption
- c) Placenta previa
- d) Preterm labor
- e) Amniotic fluid embolism

2. What is the most serious fetal complication?

- a) Intrauterine growth restriction
- b) Preterm labor
- c) Stillbirth
- d) Neonatal jaundice
- e) Cord prolapse

3. What is the most serious maternal complication?

- a) Disseminated intravascular coagulation (DIC)
- b) Preterm labor
- c) Neonatal hypoglycemia
- d) Cervical incompetence
- e) Polyhydramnios

Case 6

Chief complaint and history: A 30-year-old woman at 32 weeks gestation presents with mild vaginal bleeding and contractions every 10 minutes. She was diagnosed with marginal placenta previa at 28 weeks. Vital signs: BP: 118/75 mmHg, pulse: 82 bpm, temperature: 36.8°C. Obstetric examination: Soft, non-tender uterus, FHR: 145 bpm, cervix is 2 cm dilated.

Questions:

1. What is the most likely diagnosis?

- a) Placenta previa with preterm labor
- b) Abruptio placentae
- c) Uterine rupture
- d) Cervical incompetence
- e) Amniotic fluid embolism

2. What is the best initial management?

- a) Administer corticosteroids and tocolytics
- b) Immediate cesarean delivery
- c) Perform digital vaginal examination
- d) Expectant management without intervention
- e) Induce labor

3. When should cesarean delivery be performed for this patient?

- a) 32 weeks
- b) 34 weeks
- c) 36 weeks
- d) 37 weeks
- e) Only if labor progresses

Case 7

Chief complaint and history: A 36-year-old woman at 35 weeks gestation presents with painless vaginal bleeding. She has had three previous cesarean sections. Ultrasound shows placenta accreta. Vital signs: BP: 110/68 mmHg, pulse: 95 bpm, temperature: 37.0°C. Obstetric examination: Fundal height corresponds to gestation, FHR: 140 bpm, ongoing bleeding.

Questions:

1. What is the most appropriate management?

- a) Emergency cesarean hysterectomy
- b) Vaginal delivery
- c) Expectant management
- d) Induction of labor
- e) Perform uterine artery embolization first

2. What is the most serious maternal complication of placenta accreta?

- a) Massive postpartum hemorrhage
- b) Uterine rupture
- c) Preeclampsia
- d) Neonatal macrosomia
- e) Cervical incompetence

3. What imaging technique is most useful in assessing the severity of placenta accreta?

- a) MRI
- b) Transvaginal ultrasound with Doppler
- c) Hysteroscopy
- d) CT scan
- e) Amniocentesis

Case 8

Chief complaint and history: A 33-year-old woman at 36 weeks gestation presents with severe lower abdominal pain and vaginal bleeding. She has a history of hypertension and preeclampsia. Vital signs: BP: 165/105 mmHg, pulse: 110 bpm, temperature: 37.3°C. Obstetric examination: Rigid, tender uterus with vaginal bleeding, FHR: absent. Laboratory results show low platelets and elevated fibrin degradation products.

Questions:

1. What is the most likely diagnosis?

- a) Placenta previa
- b) Abruptio placentae with DIC
- c) Uterine rupture
- d) Vasa previa
- e) Amniotic fluid embolism

2. What is the most appropriate next step?

- a) Immediate cesarean delivery
- b) Expectant management
- c) Vaginal delivery
- d) Start oxytocin
- e) Administer methotrexate

3. What is the primary treatment for the coagulopathy (DIC)?

- a) Fresh frozen plasma and platelets
- b) IV antibiotics
- c) Oxytocin infusion
- d) Insulin therapy
- e) Corticosteroids

Case 9

Chief complaint and history: A 27-year-old woman at 34 weeks gestation presents with sudden severe abdominal pain but no visible vaginal bleeding. She has a history of chronic hypertension. Vital signs: BP: 160/100 mmHg, pulse: 105 bpm, temperature: 37.2°C. Obstetric examination: Firm, tender uterus, FHR: 90 bpm.

Questions:

1. What is the most likely diagnosis?

- a) Uterine rupture
- b) Concealed placental abruption
- c) Placenta previa
- d) Amniotic fluid embolism
- e) Preterm labor

2. What is the most immediate fetal risk?

- a) Fetal hypoxia and stillbirth
- b) Polyhydramnios
- c) Neonatal hypoglycemia
- d) Cord prolapse
- e) Macrosomia

3. What is the best next step in management?

- a) Immediate cesarean delivery
- b) Expectant management
- c) Induction of labor
- d) Perform amniocentesis
- e) Administer steroids and tocolytics

Case 10

Chief complaint and history: A 28-year-old woman at 32 weeks gestation presents for a routine ultrasound, which shows fetal vessels running across the cervix. She has no vaginal bleeding or contractions. Vital signs: BP: 120/80 mmHg, pulse: 80 bpm, temperature: 36.8°C.

Questions:

1. What is the most likely diagnosis?

- a) Placenta previa
- b) Vasa previa
- c) Placenta accreta
- d) Uterine rupture
- e) Cervical incompetence

2. What is the most appropriate management?

- a) Scheduled cesarean section at 34–36 weeks
- b) Induction of labor at term
- c) Immediate cesarean delivery
- d) Vaginal delivery with close monitoring
- e) Amniotic fluid reduction

3. What is the most serious complication of undiagnosed vasa previa?

- a) Massive fetal hemorrhage and stillbirth
- b) Preterm labor
- c) Maternal hemorrhage
- d) Placental abruption
- e) Cord prolapse

TOPIC X. POSTPARTUM HEMORRHAGE (PPH) (4-T). PRIMARY POSTPARTUM HEMORRHAGE. MANAGEMENT OF THIRD STAGE BLEEDING. STEPS OF MANUAL REMOVAL OF PLACENTA. SECONDARY POSTPARTUM HEMORRHAGE. RETAINED PLACENTA. PLACENTA ACCRETA. INVERSION OF THE UTERUS

Test questions:

1. Postpartum hemorrhage (PPH) is defined as blood loss of more than:

- a) 250 mL after vaginal delivery
- b) 500 mL after vaginal delivery or 1000 mL after cesarean section
- c) 750 mL after vaginal delivery
- d) 1500 mL after any type of delivery
- e) 300 mL after vaginal delivery

2. The most common cause of postpartum hemorrhage is:

- a) Uterine atony
- b) Retained placenta
- c) Uterine rupture
- d) Coagulopathy
- e) Cervical laceration

3. Which of the following is NOT a risk factor for postpartum hemorrhage?

- a) Prolonged labor
- b) Polyhydramnios
- c) Multiparity
- d) Hypertension
- e) Uterine overdistension

4. The "4 Ts" mnemonic for causes of PPH stands for:

- a) Tone, Trauma, Tissue, Thrombosis
- b) Temperature, Thrombin, Tears, Tension
- c) Tone, Time, Trauma, Thrombus
- d) Tissue, Timing, Tears, Thrombosis
- e) Trauma, Tears, Toxins, Tone

5. Which of the following is the FIRST-line management for primary PPH due to uterine atony?

- a) Hysterectomy
- b) Uterine artery embolization

- c) Fundal massage and oxytocin administration
- d) Manual removal of placenta
- e) Administration of heparin

6. What is the first-line uterotonic agent used in the management of postpartum hemorrhage?

- a) Misoprostol
- b) Carboprost
- c) Oxytocin
- d) Tranexamic acid
- e) Magnesium sulfate

7. Which of the following drugs is contraindicated in patients with asthma when managing PPH?

- a) Misoprostol
- b) Oxytocin
- c) Carboprost (Prostaglandin F_{2α})
- d) Methylergonovine
- e) Tranexamic acid

8. Which of the following is a second-line treatment for postpartum hemorrhage after oxytocin?

- a) Methylergonovine
- b) Heparin
- c) Furosemide
- d) Magnesium sulfate
- e) Propranolol

9. The active management of the third stage of labor includes:

- a) Delayed clamping of the cord only
- b) Immediate fundal massage, controlled cord traction, and administration of uterotonic drugs
- c) Manual removal of placenta in all cases
- d) Administration of prophylactic antibiotics
- e) Delayed delivery of the placenta

10. What is the most important step in the prevention of PPH during the third stage of labor?

- a) Delayed cord clamping
- b) Administration of oxytocin after delivery of the anterior shoulder
- c) Immediate uterine artery ligation
- d) Manual removal of placenta
- e) Routine hysterectomy

11. A placenta that remains undelivered beyond 30 minutes after birth is termed:

- a) Placenta previa
- b) Retained placenta
- c) Placental abruption
- d) Placenta accreta
- e) Uterine rupture

12. What is the most appropriate initial management for a retained placenta?

- a) Expectant management
- b) Manual removal of placenta
- c) Hysterectomy
- d) Administer magnesium sulfate
- e) High-dose oxytocin infusion

13. Placenta accreta is most strongly associated with:

- a) Prior cesarean delivery
- b) Twin pregnancy
- c) Low birth weight
- d) Preeclampsia
- e) Polyhydramnios

14. The best imaging modality for the diagnosis of placenta accreta is:

- a) MRI
- b) Hysteroscopy
- c) Transvaginal ultrasound with Doppler
- d) Amniocentesis
- e) CT scan

15. Which of the following is the hallmark clinical feature of uterine inversion?

- a) Painless vaginal bleeding
- b) Severe abdominal pain with a mass protruding from the vagina
- c) Absent fetal movement
- d) Increased amniotic fluid index
- e) Uterine rupture with fetal distress

16. What is the first step in the management of uterine inversion?

- a) Immediate replacement of the uterus into the abdominal cavity
- b) Administration of methylergonovine
- c) Hysterectomy
- d) Oxytocin infusion

- e) Perform laparotomy immediately

17. Which of the following should be AVOIDED before uterine repositioning in uterine inversion?

- a) Uterotonics (oxytocin, prostaglandins)
- b) General anesthesia
- c) Manual uterine repositioning
- d) IV fluid resuscitation
- e) Antibiotic prophylaxis

18. Which surgical procedure is often used as a last resort in uncontrolled PPH?

- a) Uterine artery ligation
- b) Peripartum hysterectomy
- c) B-Lynch compression suture
- d) Uterine artery embolization
- e) All of the above

19. What is the best pharmacologic option to treat coagulopathy in severe PPH?

- a) Fresh frozen plasma and platelets
- b) Heparin
- c) Warfarin
- d) NSAIDs
- e) Insulin

20. Secondary postpartum hemorrhage is defined as significant vaginal bleeding occurring:

- a) Within 6 hours after delivery
- b) Between 24 hours and 6 weeks postpartum
- c) Within 48 hours of delivery
- d) After 10 weeks postpartum
- e) Only after cesarean section

21. Which of the following is the most common cause of secondary postpartum hemorrhage?

- a) Retained placental tissue
- b) Uterine atony
- c) Placenta previa
- d) Coagulopathy
- e) Amniotic fluid embolism

22. The best initial diagnostic tool for evaluating secondary postpartum hemorrhage is:

- a) Complete blood count (CBC)

- b) Transvaginal ultrasound
- c) CT scan
- d) MRI
- e) Amniotic fluid analysis

23. What is the first-line treatment for secondary postpartum hemorrhage due to retained placental tissue?

- a) Broad-spectrum antibiotics
- b) Methotrexate
- c) Suction curettage
- d) Hysterectomy
- e) Oxytocin infusion

24. Which of the following is NOT a risk factor for retained placenta?

- a) Preterm delivery
- b) Uterine fibroids
- c) Previous uterine surgery
- d) Rapid third stage of labor
- e) Placenta previa

25. Which of the following is a key feature of placenta increta?

a) The placenta invades into the myometrium but does not penetrate through it

- b) The placenta penetrates through the uterine serosa
- c) The placenta separates spontaneously after delivery
- d) The placenta implants over the cervix
- e) The placenta retains in the uterus due to uterine atony

26. What is the most serious maternal complication of placenta percreta?

- a) Postpartum hemorrhage
- b) Chorioamnionitis
- c) Fetal macrosomia
- d) Polyhydramnios
- e) Gestational diabetes

27. Which of the following is a risk factor for uterine inversion?

- a) Prolonged labor
- b) Excessive cord traction during placental delivery
- c) Preeclampsia
- d) Fetal macrosomia
- e) Gestational diabetes

28. Which maneuver is used to reposition an inverted uterus?

- a) McRoberts maneuver

- b) Rubin maneuver
- c) B-Lynch suture
- d) Johnson maneuver
- e) Mauriceau maneuver

29. Which of the following should be given to relax the uterus before attempting manual repositioning in uterine inversion?

- a) Oxytocin
- b) Carboprost
- c) Nitroglycerin or terbutaline
- d) Tranexamic acid
- e) Misoprostol

30. Which surgical intervention is typically performed as a last resort for uncontrollable postpartum hemorrhage?

- a) B-Lynch compression suture
- b) Uterine artery embolization
- c) Cesarean hysterectomy
- d) Manual removal of the placenta
- e) Uterine massage

Situational tasks:

Case 1:

Chief complaint and history: A 26-year-old woman undergoes a spontaneous vaginal delivery at 39 weeks gestation. Ten minutes after delivery, she develops heavy vaginal bleeding. There is no visible trauma or retained placenta. Vital signs: BP: 90/60 mmHg, pulse: 110 bpm, temperature: 36.9°C. Obstetric examination: Soft, boggy uterus above the umbilicus.

Questions:

1. What is the most likely diagnosis?

- a) Retained placenta
- b) Uterine atony
- c) Placental abruption
- d) Uterine rupture
- e) Cervical laceration

2. What is the initial management step?

- a) Hysterectomy
- b) Uterine artery embolization
- c) Fundal massage and oxytocin administration
- d) Immediate laparotomy
- e) Administer magnesium sulfate

3. If bleeding persists after oxytocin administration, what is the next step?

- a) Administer carboprost (PGF2 α)
- b) Perform hysterectomy
- c) Administer magnesium sulfate
- d) Perform an emergency cesarean section
- e) Start expectant management)

Case 2

Chief complaint and history: A 32-year-old woman delivers a baby at 38 weeks gestation, but the placenta has not been expelled after 30 minutes. She has continuous vaginal bleeding. Vital signs: BP: 100/70 mmHg, pulse: 95 bpm, temperature: 37°C. Obstetric examination: Uterus is firm, no signs of atony, but retained placental fragments are suspected on ultrasound.

Questions:

1. What is the most likely diagnosis?

- a) Placenta previa
- b) Retained placenta
- c) Uterine atony
- d) Uterine rupture
- e) Amniotic fluid embolism

2. What is the most appropriate next step?

- a) Manual removal of the placenta
- b) Expectant management
- c) Administer methotrexate
- d) Perform cesarean section
- e) Apply fundal pressure

Case 3

Chief complaint and history: A 29-year-old woman presents two weeks after a vaginal delivery with heavy vaginal bleeding and cramping. She had an uncomplicated delivery. Vital signs: BP: 110/75 mmHg, pulse: 85 bpm, temperature: 37.5°C. Obstetric examination: Fundus is slightly enlarged, and ultrasound shows retained placental tissue.

Questions:

1. What is the most likely diagnosis?

- a) Endometritis
- b) Secondary postpartum hemorrhage due to RPOC
- c) Uterine atony

d) Placenta accreta

e) Uterine rupture

2. What is the best next step in management?

a) Suction curettage

b) Hysterectomy

c) Expectant management

d) Immediate laparotomy

e) IV magnesium sulfate

Case 4

Chief complaint and history: A 35-year-old woman at 37 weeks gestation undergoes a scheduled cesarean delivery for placenta previa. After delivery, the placenta does not separate normally, and there is heavy bleeding. Vital signs: BP: 90/60 mmHg, pulse: 115 bpm, temperature: 36.8°C. Obstetric examination: Uterus remains large with no placental separation.

Questions:

1. What is the most likely diagnosis?

a) Placental abruption

b) Uterine rupture

c) Placenta accreta

d) Uterine atony

e) Cervical laceration

2. What is the definitive treatment?

a) Hysterectomy

b) Oxytocin infusion

c) Methotrexate therapy

d) Uterine artery embolization

e) Expectant management

Case 5

Chief complaint and history: A 27-year-old woman experiences sudden severe pain and hemorrhage immediately after placental delivery. The uterus is not palpable in the abdomen, and a round mass is protruding from the vagina. Vital signs: BP: 85/55 mmHg, pulse: 120 bpm, temperature: 37°C.

Questions:

1. What is the most likely diagnosis?

a) Placenta accreta

b) Uterine rupture

c) Uterine inversion

- d) Cervical laceration
- e) Amniotic fluid embolism

2. What is the most appropriate immediate management step?

- a) Johnson maneuver (manual uterine repositioning)
- b) Immediate hysterectomy
- c) Oxytocin administration
- d) Expectant management
- e) Perform laparotomy

Case 6

Chief complaint and history: A 31-year-old woman has a massive postpartum hemorrhage that is unresponsive to uterotonics and uterine massage. Vital signs: BP: 85/50 mmHg, pulse: 130 bpm, temperature: 37°C. Obstetric examination: Severe vaginal bleeding, fundus remains atonic.

Questions:

1. What is the next best step?

- a) B-Lynch compression suture
- b) Expectant management
- c) Perform amniocentesis
- d) Administer magnesium sulfate
- e) Vaginal packing

Case 7

Chief complaint and history: A 25-year-old woman experiences heavy vaginal bleeding after a spontaneous vaginal delivery. Oxytocin and uterine massage have been performed, but the bleeding persists. Vital signs: BP: 100/65 mmHg, pulse: 105 bpm, temperature: 36.8°C.

Questions:

1. What is the most appropriate additional medication?

- a) Tranexamic acid
- b) Magnesium sulfate
- c) Heparin
- d) Aspirin
- e) Furosemide

Case 8

Chief complaint and history: A 28-year-old woman presents 12 days postpartum with persistent vaginal bleeding and foul-smelling discharge. She also complains of lower abdominal pain and fever. She had a vaginal delivery at term with no complications at the time of birth. Vital signs: BP:

115/75 mmHg, pulse: 100 bpm, temperature: 38.5°C. Obstetric examination: Uterus is tender and larger than expected for postpartum state.

Questions:

1. What is the most likely diagnosis?

- a) Retained placental tissue
- b) Endometritis
- c) Uterine rupture
- d) Placenta accreta
- e) Subinvolution of the uterus

2. What is the first-line treatment?

- a) IV broad-spectrum antibiotics
- b) Immediate suction curettage
- c) Oxytocin infusion
- d) Vaginal packing
- e) Hysterectomy

3. Which of the following is the most common causative organism of postpartum endometritis?

- a) Escherichia coli
- b) Group B Streptococcus
- c) Ureaplasma urealyticum
- d) Staphylococcus aureus
- e) Neisseria gonorrhoeae

Case 9

Chief complaint and history: A 35-year-old woman in active labor at 39 weeks gestation suddenly develops severe dyspnea, hypotension, and massive postpartum hemorrhage immediately after delivery. Vital signs: BP: 70/40 mmHg, pulse: 140 bpm, temperature: 36.5°C. Obstetric examination: Profuse vaginal bleeding, no evidence of trauma. The patient becomes cyanotic and unresponsive.

Questions:

1. What is the most likely diagnosis?

- a) Amniotic fluid embolism
- b) Uterine rupture
- c) Placenta previa
- d) Placental abruption
- e) Uterine atony

2. What is the best immediate management?

- a) Cardiopulmonary resuscitation (CPR) and immediate blood transfusion

- b) Administer oxytocin
- c) Expectant management
- d) Perform an emergency hysterectomy
- e) Perform immediate laparotomy

3. Which of the following is a classic complication of amniotic fluid embolism?

- a) Disseminated intravascular coagulation (DIC)
- b) Fetal distress
- c) Polyhydramnios
- d) Maternal hyperglycemia
- e) Neonatal hypoglycemia

Case 10

Chief complaint and history: A 30-year-old woman delivered a healthy baby via cesarean section due to fetal distress. Two hours postpartum, she experiences ongoing vaginal bleeding despite oxytocin and uterine massage. She is hemodynamically stable. Vital signs: BP: 100/65 mmHg, pulse: 98 bpm, temperature: 36.9°C. Obstetric examination: Uterus is firm but continued moderate vaginal bleeding is present.

Questions:

1. What is the most likely cause of persistent postpartum hemorrhage in this patient?

- a) Uterine atony
- b) Retained placenta
- c) Uterine artery injury
- d) Endometritis
- e) Cervical laceration

2. What is the best next step in management?

- a) Uterine artery embolization
- b) Hysterectomy
- c) Suction curettage
- d) Expectant management
- e) Administer high-dose magnesium sulfate

3. What is the major benefit of uterine artery embolization?

- a) Avoids the need for hysterectomy
- b) Increases oxytocin release
- c) Prevents future pregnancies
- d) Enhances fetal lung maturity
- e) Improves postpartum lactation

TOPIC XI. PREGNANCY IN A RH-NEGATIVE WOMAN. RED CELL ALLOIMMUNIZATION. FETAL AFFECTION BY THE RH-ANTIBODY. MANIFESTATIONS OF THE HEMOLYTIC DISEASE OF THE FETUS AND NEWBORN (HDFN). PREVENTION OF RH-IMMUNIZATION. ANTENATAL INVESTIGATION PROTOCOL OF RH-NEGATIVE MOTHERS. PLAN OF DELIVERY.

Test questions:

1. Which blood group system is most commonly associated with hemolytic disease of the fetus and newborn (HDFN)?

- a) ABO
- b) Rh
- c) Kell
- d) Duffy
- e) Kidd

2. Which Rh antigen is most commonly implicated in Rh alloimmunization?

- a) C
- b) D
- c) E
- d) c
- e) e

3. An Rh-negative woman becomes sensitized to Rh-positive blood when exposed through:

- a) Contact with Rh-positive individuals
- b) Blood transfusion or fetal-maternal hemorrhage
- c) Exposure to environmental allergens
- d) Viral infections
- e) Use of oral contraceptives

4. Which pregnancy-related event poses the highest risk of Rh sensitization?

- a) Spontaneous abortion
- b) Amniocentesis
- c) Ectopic pregnancy
- d) Delivery of an Rh-positive baby
- e) All of the above

5. Which maternal antibody is responsible for causing hemolytic disease of the fetus and newborn (HDFN)?

- a) IgA
- b) IgE
- c) IgG
- d) IgM
- e) IgD

6. Which fetal organ is primarily responsible for extramedullary hematopoiesis in Rh disease?

- a) Heart
- b) Liver
- c) Kidneys
- d) Lungs
- e) Pancreas

7. What is the most severe fetal complication of Rh alloimmunization?

- a) IUGR (Intrauterine Growth Restriction)
- b) Fetal hydrops
- c) Preterm labor
- d) Low birth weight
- e) Neonatal jaundice

8. Which of the following is NOT a feature of hydrops fetalis?

- a) Pleural effusion
- b) Pericardial effusion
- c) Polyhydramnios
- d) Oligohydramnios
- e) Skin edema

9. What is the most common neonatal manifestation of Rh hemolytic disease?

- a) Hypoglycemia
- b) Hyperbilirubinemia and jaundice
- c) Neonatal respiratory distress syndrome
- d) Patent ductus arteriosus
- e) Polycythemia

10. What is the primary cause of kernicterus in neonates with HDFN?

- a) High levels of direct bilirubin
- b) High levels of unconjugated bilirubin crossing the blood-brain barrier

- c) Decreased albumin binding capacity
- d) Increased fetal hemoglobin levels
- e) Hyperoxia during neonatal resuscitation

11. Which test is used to detect maternal Rh alloimmunization?

- a) Direct Coombs test
- b) Indirect Coombs test
- c) Kleihauer-Betke test
- d) Blood glucose test
- e) Amniotic fluid bilirubin analysis

12. Which test is used to detect fetal red blood cells in maternal circulation?

- a) Direct Coombs test
- b) Indirect Coombs test
- c) Kleihauer-Betke test
- d) Amniocentesis
- e) Cardiotocography

13. Which test assesses fetal anemia non-invasively?

- a) Amniocentesis
- b) Middle cerebral artery (MCA) Doppler ultrasound
- c) Cordocentesis
- d) Direct Coombs test
- e) Indirect Coombs test

14. What is a critical MCA Doppler peak systolic velocity (PSV) value indicating fetal anemia?

- a) >1.2 MoM
- b) >1.5 MoM
- c) >2.0 MoM
- d) >2.5 MoM
- e) >3.0 MoM

15. Which drug is used to prevent Rh sensitization?

- a) Methotrexate
- b) Rho(D) immune globulin (RhoGAM)
- c) Heparin
- d) Warfarin
- e) Erythropoietin

16. When is Rh immunoglobulin (RhIg) typically given in an Rh-negative pregnancy?

- a) At conception

b) At 28 weeks gestation and within 72 hours postpartum if the baby is Rh-positive

- c) Only after delivery
- d) Only if maternal sensitization occurs
- e) At 12 weeks gestation

17. Which test determines the appropriate dose of Rhlg in case of excessive fetal-maternal hemorrhage?

- a) Kleihauer-Betke test
- b) Indirect Coombs test
- c) Direct Coombs test
- d) Amniotic fluid bilirubin
- e) Maternal hemoglobin levels

18. Which invasive procedure is used to treat severe fetal anemia?

- a) Exchange transfusion
- b) Intrauterine blood transfusion (IUT)
- c) Fetal surgery
- d) Neonatal phototherapy
- e) Umbilical artery catheterization

19. Which is the most effective treatment for severe neonatal hyperbilirubinemia?

- a) Exchange transfusion
- b) Phototherapy
- c) Blood transfusion
- d) Corticosteroids
- e) Intravenous fluids

20. Which of the following is an indication for emergency delivery in an alloimmunized pregnancy?

- a) MCA Doppler PSV >1.5 MoM
- b) Severe fetal hydrops
- c) Mild fetal anemia
- d) Elevated maternal IgM antibodies
- e) Normal fetal biophysical profile

21. Which of the following increases the risk of Rh alloimmunization in a pregnant woman?

- a) Carrying an Rh-negative fetus
- b) Receiving Rhlg at 28 weeks
- c) Fetal-maternal hemorrhage during delivery
- d) Being O Rh-negative with an Rh-negative partner

- e) Having a previous uneventful Rh-positive pregnancy

22. Which of the following situations requires RhIg administration?

- a) Rh-negative woman with an Rh-negative fetus
- b) Rh-negative woman with an Rh-positive fetus after a normal delivery
- c) Rh-positive woman with an Rh-negative fetus
- d) Rh-negative woman with a negative indirect Coombs test postpartum
- e) Rh-negative woman with no prior pregnancies

23. What is the mechanism of action of Rho(D) immune globulin?

- a) Stimulates maternal IgG production against fetal Rh-positive cells
- b) Blocks fetal red blood cells from maternal immune recognition
- c) Enhances fetal hemoglobin production
- d) Increases maternal platelet count
- e) Neutralizes maternal IgM antibodies

24. A Kleihauer-Betke test is used to determine:

- a) The severity of fetal anemia
- b) The presence of fetal cells in maternal circulation
- c) The need for a cesarean section
- d) Maternal hemoglobin levels
- e) Maternal iron deficiency

25. If a large fetal-maternal hemorrhage is detected, what is the appropriate adjustment in RhIg dose?

- a) No change in dosage is needed
- b) Administer a higher dose based on the volume of fetal blood detected
- c) Reduce the standard dose to prevent side effects
- d) Delay administration until postpartum
- e) Stop RhIg therapy and monitor maternal antibody levels

26. Which of the following findings on ultrasound is most indicative of fetal hydrops due to Rh disease?

- a) Absent end-diastolic flow in the umbilical artery
- b) Pericardial and pleural effusions
- c) Shortened femur length
- d) Thickened nuchal translucency
- e) Oligohydramnios

27. What is the best way to confirm fetal anemia in a sensitized pregnancy?

- a) Amniotic fluid bilirubin levels
- b) Fetal hematocrit from cordocentesis
- c) Fetal heart rate monitoring
- d) Maternal hemoglobin levels
- e) Direct Coombs test on maternal blood

28. Which of the following best describes the management of a neonate with mild Rh disease at birth?

- a) Immediate exchange transfusion
- b) Immediate phototherapy
- c) IV fluid resuscitation only
- d) Direct Coombs test and observation
- e) Delayed cord clamping

29. An Rh-negative woman with an Rh-positive fetus undergoes an emergency cesarean section for fetal distress at 37 weeks. When should RhIg be administered?

- a) Before the cesarean section
- b) Within 72 hours postpartum
- c) At 28 weeks gestation
- d) Only if the indirect Coombs test is positive
- e) Not necessary if she is already sensitized

30. Which of the following is the recommended mode of delivery for an Rh-sensitized pregnancy with fetal hydrops?

- a) Elective cesarean section at 39 weeks
- b) Vaginal delivery at term
- c) Induction of labor at 37 weeks
- d) Emergency cesarean section if fetal distress is present
- e) Expectant management until spontaneous labor

Situational tasks:

Case 1

Chief complaint and history: A 28-year-old primigravida at 20 weeks gestation attends a routine prenatal visit. Her blood group is O Rh-negative, and her husband is A Rh-positive. Indirect Coombs test is negative. She has no prior pregnancies, miscarriages, or transfusions.

Vital signs: BP: 110/70 mmHg, pulse: 80 bpm, temperature: 36.8°C.

Questions:

1. What is the most appropriate next step in management?

- a) Repeat blood type screening in the third trimester

- b) Administer Rho(D) immune globulin (RhIg) at 28 weeks
- c) Perform amniocentesis
- d) No further action is required
- e) Administer IV immunoglobulin

2. What is the risk to this pregnancy if RhIg is given appropriately?

- a) Severe hemolytic disease of the newborn
- b) No significant risk
- c) Fetal hydrops
- d) Need for intrauterine transfusion
- e) Immediate emergency delivery

Case 2

Chief complaint and history: A 34-year-old multigravida at 24 weeks gestation presents for routine prenatal care. She is B Rh-negative and previously had a stillbirth due to Rh disease. Her indirect Coombs test is positive with high anti-D titers.

Vital signs: BP: 118/75 mmHg, pulse: 85 bpm, temperature: 37.0°C.

Questions:

1. What is the most appropriate next step?

- a) Immediate delivery
- b) Monitor fetal middle cerebral artery (MCA) Doppler
- c) Administer RhIg
- d) Perform cesarean section
- e) Start corticosteroids

2. What MCA Doppler finding suggests severe fetal anemia?

- a) MCA PSV < 1.0 MoM
- b) MCA PSV > 1.5 MoM
- c) MCA PSV = 1.0 MoM
- d) MCA PSV = 1.2 MoM
- e) MCA PSV > 2.5 MoM

Case 3

Chief complaint and history: A 30-year-old woman at 30 weeks gestation presents with reduced fetal movements and abnormal MCA Doppler findings (PSV > 1.5 MoM). Ultrasound reveals fetal hydrops.

Vital signs: BP: 120/80 mmHg, pulse: 88 bpm, temperature: 37.2°C.

Questions:

1. What is the most likely diagnosis?

- a) Fetal macrosomia
- b) Severe Rh alloimmunization with hydrops fetalis
- c) Fetal neural tube defect
- d) Maternal diabetes-related polyhydramnios
- e) Chorioamnionitis

2. What is the most appropriate next step?

- a) Immediate intrauterine transfusion
- b) Induction of labor
- c) Weekly fetal kick counts
- d) Administration of RhIg
- e) Expectant management

Case 4

Chief complaint and history: A 27-year-old woman (O Rh-negative) delivers a healthy term baby via vaginal delivery. The baby's blood type is A Rh-positive. The mother's indirect Coombs test was negative during pregnancy.

Vital signs: BP: 115/75 mmHg, pulse: 82 bpm, temperature: 36.9°C.

Questions:

1. What is the most appropriate next step?

- a) Administer RhIg within 72 hours
- b) No intervention needed
- c) Perform fetal transfusion
- d) Check maternal hemoglobin
- e) Start phototherapy

Case 5

Chief complaint and history: A newborn (O Rh-positive) presents with jaundice at 24 hours of life. The mother is O Rh-negative, and the baby's direct Coombs test is positive.

Vital signs: HR: 140 bpm, RR: 40 bpm, temperature: 36.5°C.

Questions:

1. What is the most likely cause of neonatal jaundice?

- a) Physiologic jaundice
- b) Rh hemolytic disease of the newborn
- c) Neonatal sepsis
- d) Breast milk jaundice
- e) Hypoglycemia

2. What is the best initial treatment?

- a) Exchange transfusion
- b) Phototherapy
- c) Blood transfusion
- d) Corticosteroids
- e) Intravenous immunoglobulin (IVIG)

Case 6

Chief complaint and history: A 35-year-old woman (B Rh-negative) had a miscarriage at 10 weeks. She did not receive RhIg after the miscarriage.

Vital signs: BP: 120/78 mmHg, pulse: 80 bpm, temperature: 37°C.

Questions:

1. What is the most appropriate next step?

- a) Indirect Coombs test to check for alloimmunization
- b) Administer RhIg immediately
- c) Repeat ultrasound for fetal viability
- d) No intervention needed
- e) Order a complete blood count (CBC)

Case 7

Chief complaint and history: A 29-year-old woman (A Rh-negative) at 24 weeks gestation presents for a routine prenatal visit. Her indirect Coombs test is positive with rising anti-D titers. She had two previous miscarriages but did not receive RhIg after them.

Vital signs: BP: 110/75 mmHg, pulse: 82 bpm, temperature: 37°C.

Questions:

1. What is the most likely diagnosis?

- a) Maternal iron deficiency anemia
- b) Rh alloimmunization
- c) ABO incompatibility
- d) Gestational hypertension
- e) Thalassemia minor

2. What is the best next step in management?

- a) Immediate administration of RhIg
- b) Serial monitoring of fetal middle cerebral artery (MCA) Doppler
- c) Immediate induction of labor
- d) Blood transfusion to the mother
- e) Expectant management until term

Case 8

Chief complaint and history: A 32-year-old primigravida (B Rh-negative) is undergoing an amniocentesis at 18 weeks gestation for genetic screening. Her indirect Coombs test is negative.

Vital signs: BP: 120/80 mmHg, pulse: 80 bpm, temperature: 36.9°C.

Questions:

1. What is the best management for Rh disease prevention in this patient?

- a) No intervention is needed
- b) Administer RhIg immediately after the procedure
- c) Administer RhIg at 28 weeks gestation only
- d) Perform an intrauterine transfusion
- e) Check maternal hemoglobin levels

2. Why is RhIg given in this case?

- a) To prevent Rh alloimmunization due to fetal-maternal hemorrhage
- b) To treat an active Rh sensitization
- c) To increase fetal red blood cell production
- d) To neutralize maternal IgG antibodies
- e) To enhance fetal lung maturity

Case 9

Chief complaint and history: A 3-day-old newborn (B Rh-positive) presents with severe jaundice, lethargy, and poor feeding. The mother is B Rh-negative and did not receive RhIg postpartum. Direct Coombs test is positive.

Vital signs: HR: 150 bpm, RR: 42 bpm, temperature: 36.5°C.

Questions:

1. What is the most likely diagnosis?

- a) Neonatal sepsis
- b) Rh hemolytic disease of the newborn (HDFN)
- c) Physiologic jaundice
- d) Neonatal polycythemia
- e) Glucose-6-phosphate dehydrogenase (G6PD) deficiency

2. What is the most appropriate treatment?

- a) Immediate exchange transfusion
- b) Phototherapy and close monitoring
- c) Corticosteroids
- d) IV magnesium sulfate
- e) Oral iron supplements

Case 10

Chief complaint and history: A 30-year-old woman (O Rh-negative) at 28 weeks gestation presents with abnormal MCA Doppler findings (PSV > 1.5 MoM). Ultrasound reveals ascites and pericardial effusion in the fetus.

Vital signs: BP: 115/75 mmHg, pulse: 90 bpm, temperature: 37.1°C.

Questions:

1. What is the most likely diagnosis?

- a) Fetal anemia due to Rh alloimmunization
- b) Twin-twin transfusion syndrome
- c) Congenital heart defect
- d) Gestational hypertension
- e) Amniotic band syndrome

2. What is the most appropriate intervention?

- a) Immediate intrauterine transfusion
- b) Elective cesarean section
- c) Expectant management until term
- d) Amniocentesis for fetal lung maturity
- e) Administration of RhIg

TOPIC XII. HUMAN IMMUNODEFICIENCY VIRUS INFECTION (HIV) AND ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). PREVENTION OF MOTHER-TO- CHILD TRANSMISSION. HIV PRE- AND POST-TEST COUNSELING. PRESCRIBING ANTENATAL, ANTIRETROVIRAL DRUGS IN HIV-POSITIVE PREGNANT WOMEN.

Test questions:

- 1. What is the most common mode of mother-to-child transmission of HIV?**
 - a) Blood transfusion
 - b) Intrapartum transmission during vaginal delivery
 - c) Skin-to-skin contact after birth
 - d) Casual contact with an HIV-positive mother
 - e) Respiratory droplets
- 2. Which factor increases the risk of mother-to-child transmission of HIV during pregnancy?**
 - a) High maternal viral load
 - b) Maternal age above 35
 - c) Maternal hypertension
 - d) Delivery by elective cesarean section
 - e) Absence of breastfeeding
- 3. What is the estimated risk of mother-to-child transmission of HIV in untreated mothers?**
 - a) Less than 1%
 - b) 2-5%
 - c) 15-45%
 - d) 50-70%
 - e) 80-90%
- 4. Which test is used for diagnosing HIV in pregnant women?**
 - a) CD4 count
 - b) HIV RNA PCR
 - c) ELISA (HIV antibody test)
 - d) Western blot
 - e) Amniocentesis
- 5. Which test confirms HIV infection in a newborn?**
 - a) HIV RNA PCR
 - b) ELISA (HIV antibody test)

- c) CD4 count
- d) HIV Western blot
- e) P24 antigen test

6. What is the most effective way to prevent mother-to-child transmission of HIV?

- a) Elective cesarean section alone
- b) Maternal ART during pregnancy and infant prophylaxis
- c) Avoidance of breastfeeding only
- d) Delayed clamping of the umbilical cord
- e) Routine immunizations for newborns

7. At what stage of pregnancy should ART be initiated for an HIV-positive woman?

- a) As soon as HIV is diagnosed
- b) At 28 weeks gestation
- c) During the third trimester only
- d) After delivery
- e) Only if the CD4 count is <200 cells/mm³

8. Which class of antiretroviral drugs is most commonly used in pregnancy?

- a) Protease inhibitors
- b) Nucleoside reverse transcriptase inhibitors (NRTIs)
- c) Non-nucleoside reverse transcriptase inhibitors (NNRTIs)
- d) Integrase inhibitors
- e) Entry inhibitors

9. Which drug is the first-line treatment for HIV in pregnant women?

- a) Zidovudine
- b) Efavirenz
- c) Tenofovir/Emtricitabine + Dolutegravir
- d) Lopinavir
- e) Enfuvirtide

10. How long should an HIV-exposed newborn receive post-exposure prophylaxis (PEP)?

- a) 3 days
- b) 7 days
- c) 4-6 weeks
- d) 12 weeks
- e) 6 months

11. What is the primary goal of pre-test counseling for HIV in pregnancy?

- a) Encourage immediate initiation of ART
- b) Provide emotional support and informed consent
- c) Recommend cesarean section for all HIV-positive women
- d) Delay HIV testing until the second trimester
- e) Focus only on the risks of breastfeeding

12. Which of the following should be included in post-test counseling for an HIV-positive pregnant woman?

- a) Discussion on ART adherence and PMTCT
- b) Recommendation to terminate the pregnancy
- c) Avoidance of prenatal care
- d) Isolation of the mother from family members
- e) Discontinuation of all vaccinations for the newborn

13. What is the preferred mode of delivery for an HIV-positive woman with a viral load <50 copies/mL?

- a) Elective cesarean section
- b) Vaginal delivery
- c) Forceps-assisted vaginal delivery
- d) Emergency cesarean section
- e) Vacuum-assisted delivery

14. When should an elective cesarean section be scheduled for an HIV-positive woman with a high viral load?

- a) 32 weeks
- b) 34 weeks
- c) 36 weeks
- d) 38 weeks
- e) 40 weeks

15. Which intervention should be avoided during labor to reduce the risk of HIV transmission?

- a) Continuous fetal monitoring
- b) Amniotomy (artificial rupture of membranes)
- c) Skin-to-skin contact after birth
- d) Umbilical cord clamping
- e) Delayed breastfeeding

16. Which feeding option is recommended for HIV-positive mothers in resource-limited settings?

- a) Exclusive formula feeding
- b) Mixed breastfeeding and formula feeding

- c) Exclusive breastfeeding while on ART
- d) Wet nursing
- e) Cow's milk supplementation

17. What is the safest infant feeding option in high-income countries for HIV-positive mothers?

- a) Exclusive formula feeding
- b) Breastfeeding with ART
- c) Partial breastfeeding
- d) Donor breast milk
- e) Sterilized cow's milk

18. Which antiretroviral drug is given to newborns for HIV prophylaxis?

- a) Nevirapine
- b) Lopinavir
- c) Ritonavir
- d) Atazanavir
- e) Darunavir

19. When should the first HIV test be performed on an HIV-exposed newborn?

- a) At birth
- b) At 6 weeks
- c) At 12 weeks
- d) At 6 months
- e) At 1 year

20. Until what age should an HIV-exposed newborn be tested for HIV before final clearance?

- a) 6 weeks
- b) 3 months
- c) 6 months
- d) 18 months
- e) 24 months

21. Which factor most influences the risk of mother-to-child transmission of HIV?

- a) Maternal age
- b) Maternal viral load
- c) Number of previous pregnancies
- d) Method of infant feeding
- e) Maternal body mass index (BMI)

22. What is the most effective intervention for preventing perinatal HIV transmission?

- a) Vaginal delivery at term
- b) ART for the mother during pregnancy
- c) Early initiation of breastfeeding
- d) Avoidance of prenatal care
- e) Delayed neonatal testing

23. Which of the following increases the risk of vertical HIV transmission?

- a) Early initiation of ART
- b) Low maternal viral load
- c) Prolonged rupture of membranes (>4 hours)
- d) Elective cesarean delivery at 38 weeks
- e) Exclusive formula feeding

24. Which combination of antiretroviral drugs is preferred for pregnant women?

- a) Tenofovir, Emtricitabine, and Dolutegravir
- b) Zidovudine monotherapy
- c) Nevirapine alone
- d) Efavirenz only
- e) Protease inhibitors alone

25. What should be done if a pregnant woman is diagnosed with HIV in the third trimester?

- a) Immediate initiation of ART
- b) Wait until postpartum to start treatment
- c) Offer termination of pregnancy
- d) Avoid prenatal care
- e) Schedule immediate cesarean section

26. Which antiretroviral drug is used in newborns for post-exposure prophylaxis (PEP)?

- a) Nevirapine
- b) Ritonavir
- c) Lopinavir
- d) Raltegravir
- e) Efavirenz

27. What is the preferred mode of delivery for an HIV-positive woman with a viral load >1,000 copies/mL?

- a) Vaginal delivery
- b) Elective cesarean section at 38 weeks

- c) Emergency cesarean section at 40 weeks
- d) Induction of labor at 37 weeks
- e) Forceps-assisted vaginal delivery

28. Which intervention should be avoided during labor in an HIV-positive woman to minimize transmission risk?

- a) Delayed cord clamping
- b) Amniotomy (artificial rupture of membranes)
- c) Continuous fetal monitoring
- d) Active management of the third stage of labor
- e) Early administration of ART

29. When should the final HIV test be performed to confirm an infant is HIV-negative?

- a) 6 weeks
- b) 12 weeks
- c) 6 months
- d) 18 months
- e) 24 months

30. Which test is used for early detection of HIV in an HIV-exposed newborn?

- a) ELISA (HIV antibody test)
- b) Western blot
- c) HIV RNA PCR
- d) CD4 count
- e) Amniocentesis

Situational tasks:

Case 1

Chief complaint and history: A 28-year-old woman at 12 weeks gestation comes for her first prenatal visit. She has no significant medical history. HIV screening is offered.

Vital signs: BP: 110/70 mmHg, pulse: 80 bpm, temperature: 36.8°C.

Questions:

1. What is the best next step?

- a) Perform an HIV antibody test (ELISA)
- b) Wait until the third trimester for testing
- c) Offer HIV testing only if the patient has risk factors
- d) Start ART without testing
- e) Perform amniocentesis

2. If the HIV test is positive, what is the next step?

- a) Western blot for confirmation
- b) Start ART immediately
- c) Check CD4 count and viral load
- d) All of the above
- e) None of the above

Case 2

Chief complaint and history: A 32-year-old woman at 20 weeks gestation is newly diagnosed with HIV during routine prenatal screening. She is asymptomatic.

Vital signs: BP: 115/75 mmHg, pulse: 85 bpm, temperature: 37°C.

Questions:

1. What is the most appropriate next step?

- a) Delay ART until the third trimester
- b) Start ART immediately
- c) Plan for cesarean delivery at 32 weeks
- d) No treatment is needed
- e) Avoid breastfeeding

2. What is the best ART regimen for this patient?

- a) Zidovudine monotherapy
- b) Efavirenz alone
- c) Tenofovir/Emtricitabine + Dolutegravir
- d) No ART needed
- e) Lopinavir alone

Case 3

Chief complaint and history: A 29-year-old HIV-positive woman at 36 weeks gestation has a viral load of 15,000 copies/mL despite being on ART.

Vital signs: BP: 120/80 mmHg, pulse: 88 bpm, temperature: 37.1°C.

Questions:

1. What is the best mode of delivery?

- a) Elective cesarean section at 38 weeks
- b) Vaginal delivery
- c) Emergency cesarean section at 40 weeks
- d) Induction of labor at 37 weeks
- e) Forceps-assisted vaginal delivery

2. What is the reason for choosing cesarean delivery?

- a) To prevent preterm labor
- b) To reduce the risk of HIV transmission
- c) To improve neonatal lung function
- d) To allow for vaginal healing postpartum
- e) To improve maternal immune function

Case 4

Chief complaint and history: A 27-year-old HIV-positive woman at 38 weeks gestation has a viral load of <50 copies/mL and is on ART.

Vital signs: BP: 110/70 mmHg, pulse: 80 bpm, temperature: 36.8°C.

Questions:

1. What is the best mode of delivery?

- a) Elective cesarean section
- b) Vaginal delivery
- c) Emergency cesarean section
- d) Vacuum-assisted vaginal delivery
- e) Forceps-assisted vaginal delivery

2. What additional intervention is required during labor?

- a) IV Zidovudine
- b) No additional intervention
- c) Immediate neonatal blood transfusion
- d) Amniotomy to shorten labor
- e) Avoid oxytocin

Case 5

Chief complaint and history: A HIV-positive mother delivers a full-term baby via cesarean section.

Vital signs: Baby HR: 140 bpm, RR: 40 bpm, temperature: 36.5°C.

Questions:

1. What is the best next step for the newborn?

- a) Start Nevirapine prophylaxis
- b) Perform an HIV antibody test immediately
- c) Delay all vaccinations
- d) Initiate breastfeeding immediately
- e) No intervention is needed

2. How long should the newborn receive ART prophylaxis?

- a) 3 days
- b) 7 days

- c) 4-6 weeks
- d) 12 weeks
- e) 6 months

Case 6

Chief complaint and history: A HIV-positive mother asks if she can breastfeed her baby.

Vital signs: BP: 110/70 mmHg, pulse: 80 bpm, temperature: 36.8°C.

Questions:

1. What is the best advice?

- a) Exclusive formula feeding in high-resource settings
- b) Mixed feeding with formula and breast milk
- c) Exclusive breastfeeding while on ART in low-resource settings
- d) Wet nursing
- e) Delayed breastfeeding until 6 months

2. When is exclusive breastfeeding recommended for an HIV-positive mother?

- a) If ART is unavailable
- b) In low-resource settings with no access to clean water
- c) If the baby is born prematurely
- d) If the mother refuses ART
- e) Never

Case 7

Chief complaint and history: A 30-year-old HIV-positive woman at 34 weeks gestation presents for prenatal care. She was diagnosed with HIV 3 years ago but has been non-adherent to ART. Her viral load is 20,000 copies/mL.

Vital signs: BP: 120/80 mmHg, pulse: 85 bpm, temperature: 37°C.

Questions:

1. What is the most appropriate next step?

- a) Restart ART immediately
- b) Schedule cesarean section at 40 weeks
- c) No intervention is needed until labor begins
- d) Administer HIV vaccine
- e) Avoid ART to prevent resistance

2. What is the best delivery plan for this patient?

- a) Vaginal delivery at term

- b) Elective cesarean section at 38 weeks
- c) Forceps-assisted vaginal delivery
- d) Emergency cesarean section at 40 weeks
- e) Expectant management until spontaneous labor

Case 8

Chief complaint and history: A HIV-positive mother gives birth to a full-term baby via cesarean section. The mother was on ART and had an undetectable viral load at delivery.

Vital signs: Baby HR: 140 bpm, RR: 42 bpm, temperature: 36.5°C.

Questions:

1. What is the most appropriate HIV test for this newborn?

- a) ELISA (HIV antibody test) at birth
- b) HIV RNA PCR at birth
- c) Western blot
- d) CD4 count
- e) No testing is needed

2. If the initial HIV RNA PCR test is negative, when should testing be repeated?

- a) No repeat testing is needed
- b) At 6 weeks and 18 months
- c) Only at 18 months
- d) Monthly for the first year
- e) At 1 week and 2 weeks postpartum

Case 9

Chief complaint and history: A 27-year-old woman presents in active labor at 39 weeks gestation with no prior prenatal care. She has no known medical conditions. A rapid HIV test in triage is positive.

Vital signs: BP: 125/85 mmHg, pulse: 90 bpm, temperature: 37.2°C.

Questions:

1. What is the best next step?

- a) Start IV Zidovudine and perform emergency cesarean section
- b) Allow vaginal delivery and initiate ART postpartum
- c) Start ART immediately and continue vaginal delivery
- d) Delay labor and confirm HIV test before proceeding
- e) No intervention needed

2. What additional intervention should be given to the newborn?

- a) HIV post-exposure prophylaxis with Nevirapine
- b) No intervention needed

- c) Immediate blood transfusion
- d) Avoid vaccination
- e) Breastfeeding should be initiated immediately

Case 10

Chief complaint and history: A 35-year-old HIV-positive woman recently delivered a healthy baby. She wants to breastfeed but is unsure whether it is safe.

Vital signs: BP: 110/70 mmHg, pulse: 78 bpm, temperature: 36.8°C.

Questions:

1. What is the best advice regarding breastfeeding?

- a) Formula feeding is recommended in high-resource settings
- b) Exclusive breastfeeding while on ART is recommended in resource-limited settings
- c) Mixed feeding (breastfeeding + formula) is preferred
- d) Avoid breastfeeding at all costs
- e) Delay breastfeeding until 6 months postpartum:

2. What is the primary risk of breastfeeding in HIV-positive mothers?

- a) Transmission of HIV through breast milk
- b) Delayed maternal immune response
- c) Increased maternal viral load
- d) Growth restriction in the infant
- e) Malnutrition

TOPIC XIII. PUERPERAL PYREXIA. PUERPERAL SEPSIS. SUBINVOLUTION. URINARY COMPLICATIONS. BREAST COMPLICATIONS. PUERPERAL VENOUS THROMBOSIS

1. Puerperal pyrexia is defined as a temperature of:

- a) $\geq 38^{\circ}\text{C}$ on two separate occasions within 10 days postpartum
- b) $\geq 37.5^{\circ}\text{C}$ at any time after delivery
- c) $\geq 39^{\circ}\text{C}$ on the day of delivery
- d) $\geq 38.5^{\circ}\text{C}$ within 6 weeks postpartum
- e) $\geq 37^{\circ}\text{C}$ for more than 24 hours

2. The most common cause of puerperal pyrexia is:

- a) Endometritis
- b) Urinary tract infection
- c) Mastitis
- d) Wound infection
- e) Deep vein thrombosis (DVT)

3. Which of the following is a major risk factor for puerperal sepsis?

- a) Elective cesarean section
- b) Prolonged rupture of membranes
- c) Exclusive breastfeeding
- d) High BMI
- e) Early ambulation postpartum

4. The most common causative organism of puerperal sepsis is:

- a) Escherichia coli
- b) Staphylococcus aureus
- c) Group A Streptococcus
- d) Mycoplasma hominis
- e) Klebsiella pneumonia

5. Which of the following is NOT a feature of severe puerperal sepsis?

- a) Hypotension
- b) Oliguria
- c) Jaundice
- d) Respiratory distress
- e) Bradycardia

6. Which test is most useful in diagnosing endometritis?

- a) White blood cell count
- b) Endometrial biopsy
- c) Transvaginal ultrasound

- d) Blood culture
- e) C-reactive protein (CRP)

7. What is the first-line antibiotic therapy for suspected puerperal sepsis?

- a) Amoxicillin
- b) Vancomycin
- c) Clindamycin + Gentamicin
- d) Ceftriaxone + Metronidazole
- e) Azithromycin

8. Which of the following is the most effective strategy for preventing puerperal sepsis?

- a) Routine use of prophylactic antibiotics in all deliveries
- b) Delayed cord clamping
- c) Good hand hygiene and aseptic delivery techniques
- d) Immediate breastfeeding
- e) Routine perineal suturing after vaginal delivery

9. Which condition should be considered in a postpartum woman with abdominal pain, fever, foul-smelling lochia, and uterine tenderness?

- a) Endometritis
- b) Subinvolution of the uterus
- c) Ovarian torsion
- d) Urinary retention
- e) Puerperal thrombophlebitis

10. What is the most appropriate management for severe puerperal sepsis?

- a) Immediate hysterectomy
- b) IV broad-spectrum antibiotics, fluid resuscitation, and source control

- c) Isolation of the mother and infant
- d) Oral antibiotics and observation
- e) Surgical debridement of the uterus

11. Which of the following is NOT a cause of subinvolution of the uterus?

- a) Retained placental fragments
- b) Infection (endometritis)
- c) Uterine fibroids
- d) Postpartum hemorrhage
- e) Early ambulation

12. The most common clinical sign of subinvolution is:

- a) Persistent heavy lochia
- b) Hypertension

- c) Bradycardia
- d) Reduced milk production
- e) Postpartum psychosis

13. The best management for subinvolution due to retained placental tissue is:

- a) Methylergonovine
- b) IV antibiotics
- c) Manual removal or suction curettage
- d) Fluid resuscitation
- e) Expectant management

14. What is the most common urinary complication in the puerperium?

- a) Urinary retention
- b) Vesicovaginal fistula
- c) Ureteral obstruction
- d) Urinary incontinence
- e) Kidney stones

15. Which of the following is the best initial management for postpartum urinary retention?

- a) Bladder training exercises
- b) Immediate catheterization
- c) IV antibiotics
- d) Ureteroscopy
- e) Pelvic MRI

16. The most common cause of postpartum mastitis is:

- a) Group B Streptococcus
- b) Staphylococcus aureus
- c) Escherichia coli
- d) Klebsiella pneumoniae
- e) Mycoplasma hominis

17. A breastfeeding woman presents with fever, breast tenderness, and erythema. What is the most likely diagnosis?

- a) Mastitis
- b) Breast abscess
- c) Engorgement
- d) Fibrocystic breast changes
- e) Nipple fissure

18. What is the best treatment for mastitis?

- a) Breastfeeding should be stopped immediately
- b) Oral antibiotics (dicloxacillin or cephalexin) and continued breastfeeding
- c) Surgical drainage

d) Cold compresses only

e) High-dose steroids

19. Which of the following is the most common postpartum thrombotic complication?

a) Superficial thrombophlebitis

b) Deep vein thrombosis (DVT)

c) Pulmonary embolism

d) Cerebral venous thrombosis

e) Myocardial infarction

20. What is the best diagnostic test for suspected postpartum DVT?

a) Doppler ultrasound

b) D-dimer

c) Venography

d) MRI

e) CT angiography

21. Which is the preferred anticoagulant in postpartum DVT?

a) Warfarin

b) Unfractionated heparin

c) Low molecular weight heparin (LMWH)

d) Aspirin

e) Clopidogrel

22. Which of the following is NOT a common clinical feature of puerperal sepsis?

a) Fever $>38^{\circ}\text{C}$

b) Uterine tenderness

c) Profuse vaginal bleeding

d) Foul-smelling lochia

e) Tachycardia

23. Which of the following postpartum conditions requires urgent surgical intervention?

a) Endometritis

b) Peritonitis secondary to uterine rupture

c) Mastitis

d) Urinary retention

e) Breast engorgement

24. Which of the following factors increases the risk of developing postpartum endometritis?

a) Exclusive breastfeeding

b) Prolonged labor and frequent vaginal exams

c) Early ambulation after delivery

- d) Low maternal age
- e) Shortened second stage of labor

25. Postpartum urinary retention is most commonly caused by:

- a) Urethral trauma during delivery
- b) Urinary tract infection
- c) Neurogenic bladder dysfunction
- d) Bladder overdistension during labor
- e) Diabetes insipidus

26. Which of the following is the best initial management for postpartum urinary tract infection (UTI)?

- a) IV antibiotics for 2 weeks
- b) Oral antibiotics (e.g., nitrofurantoin or cephalexin)
- c) Immediate catheterization for 1 week
- d) Surgical intervention
- e) Increased fluid intake only

27. A 32-year-old breastfeeding woman presents with fever, unilateral breast tenderness, and erythema. She is diagnosed with mastitis. What is the most appropriate next step?

- a) Discontinue breastfeeding
- b) Start oral antibiotics and continue breastfeeding
- c) Drainage and surgical removal of affected breast tissue
- d) High-dose corticosteroids
- e) Immediate hospital admission

28. Which of the following increases the risk of developing a breast abscess in postpartum women?

- a) Prolonged breastfeeding
- b) Incomplete emptying of the breast and untreated mastitis
- c) Exclusive formula feeding
- d) High maternal BMI
- e) Multiparity

29. Which of the following is NOT a risk factor for puerperal venous thrombosis?

- a) Cesarean delivery
- b) Smoking
- c) Obesity
- d) Prolonged sitting after delivery
- e) Frequent ambulation postpartum

30. Which clinical sign is highly suggestive of deep vein thrombosis (DVT) in postpartum women?

- a) Bilateral leg swelling
- b) Chest pain

- c) Unilateral leg swelling and calf tenderness
- d) Fever without localizing signs
- e) Increased urinary frequency

Situational tasks:

Case 1

Chief complaint and history: A 29-year-old woman presents 5 days postpartum with fever (38.5°C), lower abdominal pain, and foul-smelling lochia. She had a prolonged labor with rupture of membranes for 18 hours before a vaginal delivery.

Vital signs: BP: 110/70 mmHg, pulse: 98 bpm, temperature: 38.5°C.

Questions:

1. What is the most likely diagnosis?

- a) Urinary tract infection (UTI)
- b) Puerperal endometritis
- c) Mastitis
- d) Deep vein thrombosis
- e) Wound infection

2. What is the best next step in management?

- a) Oral antibiotics and home care
- b) IV Clindamycin and Gentamicin
- c) Surgical debridement
- d) No treatment is needed
- e) Immediate hysterectomy

Case 2

Chief complaint and history: A 30-year-old woman, 3 weeks postpartum presents with persistent vaginal bleeding and a larger-than-expected uterus on examination.

Vital signs: BP: 115/75 mmHg, pulse: 86 bpm, temperature: 37°C.

Questions:

1. What is the most likely diagnosis?

- a) Retained placental tissue
- b) Uterine rupture
- c) Subinvolution of the uterus
- d) Preeclampsia
- e) Ectopic pregnancy

2. What is the most appropriate management?

- a) Administer methylergonovine
- b) Perform an emergency hysterectomy
- c) Give NSAIDs and observe

- d) Immediate laparotomy
- e) Perform uterine artery embolization

Case 3

Chief complaint and history: A 25-year-old woman, 24 hours postpartum is unable to pass urine and complains of suprapubic discomfort. She had a prolonged second stage of labor.

Vital signs: BP: 120/80 mmHg, pulse: 88 bpm, temperature: 36.9°C.

Questions:

1. What is the most likely diagnosis?

- a) Urinary tract infection
- b) Neurogenic bladder dysfunction
- c) Postpartum urinary retention
- d) Ureteral obstruction
- e) Bladder rupture

2. What is the best initial management?

- a) Immediate bladder catheterization
- b) Intravenous antibiotics
- c) Observation only
- d) Ureterscopy
- e) Administer diuretics

Case 4

Chief complaint and history: A 32-year-old breastfeeding mother presents with fever (38.2°C), right breast pain, and redness.

Vital signs: BP: 110/75 mmHg, pulse: 95 bpm, temperature: 38.2°C.

Questions:

1. What is the most likely diagnosis?

- a) Breast abscess
- b) Engorgement
- c) Mastitis
- d) Fibrocystic breast disease
- e) Inflammatory breast cancer

2. What is the best treatment?

- a) Stop breastfeeding immediately
- b) Oral antibiotics and continued breastfeeding
- c) Immediate surgical drainage
- d) High-dose corticosteroids
- e) No treatment required

Case 5

Chief complaint and history: A 35-year-old woman, 7 days postpartum presents with unilateral calf pain and swelling.

Vital signs: BP: 125/80 mmHg, pulse: 90 bpm, temperature: 37.3°C.

Questions:

1. What is the most likely diagnosis?

- a) Cellulitis
- b) Puerperal venous thrombosis (DVT)
- c) Muscle strain
- d) Preeclampsia
- e) Peripheral neuropathy

2. What is the best diagnostic test?

- a) Doppler ultrasound
- b) D-dimer
- c) MRI
- d) CT angiography
- e) X-ray

Case 6

Chief complaint and history: A 28-year-old woman, 4 days postpartum presents with dysuria, fever, and lower abdominal pain.

Vital signs: BP: 118/75 mmHg, pulse: 88 bpm, temperature: 38.4°C.

Questions:

1. What is the most likely diagnosis?

- a) Urethral trauma
- b) Postpartum urinary tract infection (UTI)
- c) Kidney stones
- d) Bladder rupture
- e) Vaginal candidiasis

2. What is the best treatment?

- a) IV fluids only
- b) Oral antibiotics (nitrofurantoin or cephalexin)
- c) Immediate catheterization
- d) Observation without treatment
- e) Surgical intervention

Case 7

Chief complaint and history: A 34-year-old woman, 6 days postpartum presents with high fever (39.2°C), chills, confusion, and severe lower abdominal pain. She had a prolonged labor with premature rupture of membranes (PROM) >24 hours.

Vital signs: BP: 85/50 mmHg, pulse: 120 bpm, temperature: 39.2°C, respiratory rate: 26 bpm.

Questions:**1. What is the most likely diagnosis?**

- a) Preeclampsia
- b) Acute appendicitis
- c) Puerperal sepsis leading to septic shock
- d) Pulmonary embolism
- e) Mastitis

2. What is the best immediate management?

- a) IV broad-spectrum antibiotics and aggressive fluid resuscitation
- b) Oral antibiotics and discharge home
- c) Wait for culture results before initiating treatment
- d) Blood transfusion only
- e) Immediate hysterectomy

Case 8

Chief complaint and history: A 27-year-old woman, 7 days after cesarean delivery presents with fever (38.3°C), erythema, tenderness, and purulent discharge from the incision site.

Vital signs: BP: 120/80 mmHg, pulse: 90 bpm, temperature: 38.3°C.

Questions:**1. What is the most likely diagnosis?**

- a) Puerperal mastitis
- b) Incisional wound infection
- c) Endometritis
- d) Urinary tract infection
- e) Normal healing of a surgical wound

2. What is the best treatment?

- a) Open and drain the wound, start antibiotics
- b) Apply topical antibiotics only
- c) Avoid touching the wound and observe for 48 hours
- d) Immediate hysterectomy
- e) Oral steroids

Case 9

Chief complaint and history: A 31-year-old breastfeeding mother presents with high fever (39°C), severe right breast pain, swelling, and a fluctuant mass.

Vital signs: BP: 118/78 mmHg, pulse: 92 bpm, temperature: 39°C.

Questions:**1. What is the most likely diagnosis?**

- a) Mastitis
- b) Engorgement

- c) Breast abscess
- d) Fibroadenoma
- e) Breast cancer

2. What is the most appropriate management?

- a) Incision and drainage, antibiotics, and continued breastfeeding
- b) Stop breastfeeding immediately
- c) Oral antibiotics alone
- d) No treatment needed
- e) Surgical removal of the affected breast

Case 10

Chief complaint and history: A 35-year-old woman, 5 days postpartum after a cesarean section, presents with sudden-onset chest pain, shortness of breath, and hemoptysis.

Vital signs: BP: 100/60 mmHg, pulse: 110 bpm, respiratory rate: 28 bpm, oxygen saturation: 89%.

Questions:

1. What is the most likely diagnosis?

- a) Pneumonia
- b) Acute coronary syndrome
- c) Pulmonary embolism (PE)
- d) Preeclampsia
- e) Myocardial infarction

2. What is the best immediate management?

- a) Administer low molecular weight heparin (LMWH)
- b) Observe for 24 hours
- c) Perform emergency cesarean section
- d) Give IV fluids only
- e) Start antibiotics for pneumonia

TEST QUESTIONS AND CASE SCENARIOS WITH ANSWERS

Test numbers, tasks, and question	Chapter numbers.												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Test 1	d	c	e	d	b	d	b	b	c	b	b	b	a
Test 2	b	b	e	b	b	b	c	b	d	a	b	a	a
Test 3	c	a	e	b	b	c	c	a	a	d	b	c	b
Test 4	c	b	e	c	c	d	c	c	c	a	e	c	c
Test 5	b	b	e	b	b	c	c	b	b	c	c	a	e
Test 6	c	d	e	b	b	c	a	c	e	c	b	b	c
Test 7	d	c	e	c	b	c	c	b	a	c	b	a	c
Test 8	c	b	e	b	a	d	b	b	d	a	d	b	c
Test 9	d	a	e	a	a	b	c	b	c	b	b	c	a
Test 10	a	c	e	b	c	a	b	c	a	b	b	c	b
Test 11	b	b	e	b	b	c	a	c	b	b	b	b	e
Test 12	c	c	e	b	a	c	d	c	a	b	c	a	a
Test 13	d	c	e	d	c	c	a	b	c	a	b	b	c
Test 14	d	c	c	c	b	c	c	b	b	c	b	d	a
Test 15	b	a	d	c	b	a	c	a	b	b	b	b	b
Test 16	a	b	e	a	b	a	d	b	b	a	b	c	b
Test 17	c	c	e	c	b	b	c	c	a	a	a	a	a
Test 18	c	b	b	e	b	b	b	c	b	e	b	a	b
Test 19	b	b	e	c	b	b	d	c	a	a	a	a	b
Test 20	a	b	e	b	c	b	a	a	b	b	b	b	a
Test 21	c	b	e	c	a	c	b	c	b	a	c	b	c
Test 22	c	b	e	c	b	c	b	d	a	b	b	b	c
Test 23	b	b	e	b	b	b	b	a	b	c	b	c	b
Test 24	a	c	e	c	a	c	a	b	c	d	b	a	b
Test 25	d	a	e	a	d	a	b	b	a	a	b	a	d
Test 26	b	c	e	b	c	b	b	c	b	a	b	a	b
Test 27	a	b	c	c	c	c	a	b	c	b	b	b	b
Test 28	b	a	c	c	d	b	a	a	e	d	d	b	b
Test 29	c	a	c	b	c	b	a	c	a	c	b	d	e
Test 30	a	b	e	c	c	a	c	b	c	c	d	c	c

ANSWERS TO SITUATIONAL TASKS

TOPIC	Case	Q1	Q2	Q3
Topic1	Case1	b	b	-
Topic1	Case2	b	c	-
Topic1	Case3	b	a	-
Topic1	Case4	d	a	-
Topic1	Case5	b	a	-
Topic1	Case6	b	a	-
Topic1	Case7	b	b	-
Topic 1	Case8	b	a	-
Topic 1	Case9	c	c	-
Topic1	Case10	b	a	-
Topic2	Case1	a	c	b
Topic2	Case2	d	c	b
Topic2	Case3	b	c	a
Topic2	Case4	b	c	c
Topic2	Case5	b	b	b
Topic2	Case6	a	b	a
Topic2	Case7	b	c	a
Topic2	Case8	b	a	b
Topic2	Case9	b	c	a
Topic2	Case10	b	a	a
Topic3	Case1	b	b	c
Topic3	Case2	c	c	a
Topic3	Case3	b	c	a
Topic3	Case4	a	d	b
Topic3	Case5	b	c	d
Topic3	Case6	b	b	b
Topic3	Case7	c	c	a
Topic3	Case8	c	a	c
Topic3	Case9	b	c	c
Topic3	Case10	b	a	b
Topic4	Case1	c	b	b
Topic4	Case2	b	c	a
Topic4	Case3	b	b	a
Topic4	Case4	b	c	b
Topic4	Case5	b	c	b
Topic4	Case6	a	b	a
Topic4	Case7	b	c	c
Topic4	Case8	b	b	b
Topic4	Case9	b	b	c
Topic4	Case10	b	c	b
Topic5	Case1	b	b	c
Topic5	Case2	b	b	b
Topic5	Case3	a	a	b

Topic5	Case4	d	a	c
Topic5	Case5	a	a	b
Topic5	Case6	c	a	b
Topic5	Case7	b	b	c
Topic5	Case8	b	b	c
Topic5	Case9	c	c	c
Topic5	Case10	c	c	d
Topic6	Case1	c	a	b
Topic6	Case2	b	a	c
Topic6	Case3	c	a	c
Topic6	Case4	a	a	a
Topic6	Case5	a	a	b
Topic6	Case6	b	a	b
Topic6	Case7	a	a	a
Topic6	Case8	a	a	a
Topic6	Case9	a	a	a
Topic6	Case10	b	a	a
Topic7	Case1	b	c	c
Topic7	Case2	c	b	c
Topic7	Case3	c	a	a
Topic7	Case4	c	a	b
Topic7	Case5	b	a	b
Topic7	Case6	a	b	c
Topic7	Case7	c	a	b
Topic7	Case8	c	a	a
Topic7	Case9	b	a	b
Topic7	Case10	c	a	c
Topic8	Case1	b	c	b
Topic8	Case2	c	b	b
Topic8	Case3	b	a	b
Topic8	Case4	b	b	c
Topic8	Case5	b	a	a
Topic8	Case6	c	b	c
Topic8	Case7	b	b	c
Topic8	Case8	b	b	c
Topic8	Case9	c	b	c
Topic8	Case10	b	b	a
Topic9	Case1	b	b	d
Topic9	Case2	a	a	-
Topic9	Case3	a	a	-
Topic9	Case4	b	a	
Topic9	Case5	b	c	a
Topic9	Case6	a	a	e
Topic9	Case7	a	a	b
Topic9	Case8	b	a	a
Topic9	Case9	b	a	a
Topic9	Case10	b	a	a

Topic10	Case1	b	c	a
Topic10	Case2	b	a	-
Topic10	Case3	b	a	-
Topic10	Case4	c	a	-
Topic10	Case5	c	a	-
Topic10	Case6	a	-	-
Topic10	Case7	a	-	-
Topic10	Case8	b	a	c
Topic10	Case9	a	a	a
Topic10	Case10	c	a	a
Topic11	Case1	b	b	-
Topic11	Case2	b	b	-
Topic11	Case3	b	a	-
Topic11	Case4	a	-	-
Topic11	Case5	b	b	-
Topic11	Case6	a		-
Topic11	Case7	b	b	-
Topic11	Case8	b	a	-
Topic11	Case9	b	a	-
Topic11	Case10	a	a	-
Topic12	Case1	a	d	-
Topic12	Case2	b	c	-
Topic12	Case3	a	b	-
Topic12	Case4	b	a	-
Topic12	Case5	a	c	-
Topic12	Case6	a	b	-
Topic12	Case7	a	b	-
Topic12	Case8	b	b	-
Topic12	Case9	c	a	-
Topic12	Case10	a,b	a	-
Topic13	Case1	b	b	-
Topic13	Case2	c	a	-
Topic13	Case3	c	a	-
Topic13	Case4	c	b	-
Topic13	Case5	b	a	-
Topic13	Case6	b	b	-
Topic13	Case7	c	a	-
Topic13	Case8	b	a	-
Topic13	Case9	c	a	-
Topic13	Case10	c	a	-

RECOMMENDED LITERATURE

Basic

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Collection of test and clinical case scenarios in obstetrics

(o'quv adabiyotining nomi va turi: darslik, o'quv qo'llanma)

O'quv qo'llanma

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REKTOR:

J. RIZAYEV



Ra'yatga olish raqami

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